# UNIVERSITY of MANITOBA

WINNIPEG



Arts and Science Calendar Including Pharmacy Session 1933-1934

# CALENDAR

# University of Manitoba

Incorporated by Act of the Manitoba Legislature, 1877 Definitely Reorganized as a Provincial University, 1917

ARTS AND SCIENCE INCLUDING PHARMACY 1933-1934

WINNIPEG
The Hignell Printing Company
1933

# CALENDAR

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In the numbering of Courses of Instruction throughout this Calendar, except where it is otherwise explicitly stated in a footnote, the assignment of an odd number indicates that the course is given during the first term of the annual session, that of an even number that is given during the second term, the assignment of a double number, odd and even, that it is given throughout both terms of the session.

# **ALMANAC 1933-1934**

#### 1933

- May 22—Manitoba Summer School special session begins in Pre-Medical Sciences and in Engineering subjects.
- June 1-27—Within these dates students may register at the Dean's Office, Administration Building, Kennedy Street, Winnipeg, for courses to be taken at the general session of the Manitoba Summer School.
- July 3—Registration for Summer School courses at the University of Manitoba, Fort Garry site.
  - General session of the Manitoba Summer School begins.
- Aug. 1—Last day for receipt of applications for September supplemental examinations in Arts and Science, Engineering and Architecture, Pharmacy and Medicine.
  - 22—Applications for admission to the Faculty of Medicine from students presenting credits other than from this University should be filed with the Registrar by this date.
- Sept 1—Applications for admission to the Faculty of Arts and Science from students entering from High Schools together with their credentials should be filed with the Registrar by this date.

  Survey School in Engineering begins.
  - 5—Supplemental examinations in Arts and Science (including Pharmacy) begin.
  - 7—Registration in Law commences at University and Law School. First half of tuition fee payable.
  - 9-Last day for registration in Law, without penalty.
  - 11—Lectures in Law begin.

    Imposition of penalty for late registration in Law begins.
  - 15—Supplemental and special examinations in Medicine begin.
    No registration in Law permitted after this date except in special cases.
  - 18—Registration day for students of First Year of the Junior Division in Arts and Science, and for students of Pharmacy, First and Second Years, at the Administration Building, Kennedy Street.
    - Last day for filing notice of intention to write on supplemental examinations with Recorder of Law School.
  - 18-19—Registration days for First and Second Year Degree students in Agriculture and Home Economics, Fort Garry.

- 19—Lectures in First Year of the Junior Division in Arts and Science, and in Pharmacy (First and Second Years) begin.
- 20—Lectures begin for the First and Second Years of the Degree courses in Agriculture and Home Economics.
  - Last day for payment, without penalty of \$2.00, of fees of students of First Year of the Junior Division in Arts and Science and of Pharmacy.
- 21-Registration in Medicine begins.
- 22-23—Last days for registration of students of the Senior Division in Arts and Science at the Administration Building, Kennedy Street.
- 23—Registration in Medicine closes at 12 o'clock. Last day for payment of fees in Medicine.
  - Supplemental examinations for Degree students in Agriculture and Home Economics.
- 25—Last day for registration, without penalty of \$2.00, of students in the Second Year of the Junior Division in Arts and Science at the Administration Building, Kennedy Street, Winnipeg, and in the Senior Division at the Fort Garry site.
  - Lectures in Medicine begin. Inaugural address by the Honorary President of the Manitoba Medical Students' Association (Professor D. S. MacKay) at 10 a.m., in Lecture Theatre "A," Medical College.
- 25-26—Registration days for Third and Fourth Year Degree students in Agriculture and Home Economics.
- 26—Lectures begin for the Second Year of the Junior Division in Arts and Science, and for the Senior Division in Arts and Science.
  - Supplemental examinations in Engineering and Architecture begin.
- 27—Lectures begin for the Third and Fourth Years of the Degree courses in Agriculture and Home Economics.
- 29-Registration in Engineering and Architecture begins.
- Oct. 2—Registration closes in Arts and Science at 4 p.m. Last day for payment of fees in this Faculty.

Lectures in Engineering and Architecture begin.

Supplemental and special examinations in Law begin.

4—Imposition of penalty for late registration in Engineering and Architecture begins.

Summer theses in Engineering to be handed in by 5 p.m.

- 5—Registration in Engineering and Architecture closes at 5 p.m. Last day for payment of fees in Engineering and Architecture.
- 6-Inter-Faculty Track Meet-no classes in afternoon.
- 9—Thanksgiving Day—no classes.

- Nov. 1-Registration day for Diploma students in Agriculture.
  - 2-Lectures commence for Diploma students in Agriculture.
  - 11-Remembrance Day.
  - 13-Term examinations in Law commence.
- Dec. 7-Lectures close in Arts and Science, and Pharmacy.
  - 11-December examinations in Arts and Science and Pharmacy begin.
  - 13-Lectures close in Engineering and Architecture.
  - 14—December examinations in Engineering and Architecture begin.
  - 15—December examinations in Agriculture and Home Economics begin.
  - 20-Lectures close in Law. Christmas vacation begins.
  - 22-Lectures close in Medicine. Christmas vacation begins.

#### 1934

- Jan. 3—Lectures in Arts and Science and Pharmacy resumed.
  - Lectures in Engineering and Architecture resumed.

Lectures in Medicine resumed.

Lectures in Agriculture and Home Economics resumed.

- 4—Lectures in Law resumed. Second half of tuition fee payable.
- 15-Extra fee for late payment of second half of tuition fee in Law.
- Feb. 12—Term examinations in Law commence.
- Mar. 15—Last day for receiving applications for admission to Medicine for the Session 1934-1935. Applications to be made to the Registrar of the University (see page 28).
  - 23-Lectures close for Diploma students in Agriculture.
  - 24—Examinations begin for Diploma students in Agriculture.
  - 29-Lectures close in Law.
  - 30-Good Friday-no classes.
- April 5-Lister Day. Address will be delivered at the Medical College.
  - 6-Lectures close in Arts and Science and Pharmacy.
    - Last day for filing notice of intention to write on regular examinations with Recorder of Law School.

- 13-Lectures close in Engineering and Architecture.
  - Lectures close for Degree students in Agriculture and Home Economics.
- 16-Examinations in Engineering and Architecture begin.
  - Regular final examinations in Law commence.
  - Examinations for Degree students in Agriculture and Home Economics begin.
- 17—Second Term examinations in Arts and Science and Pharmacy begin.
- 24-Final written examinations in Medicine (Fifth Year) begin.
- May 4—Presentation of Bronze Medals and Certificates of Merit (for term marks) in Lecture Theatre "A," Medical College, at 10 a.m. Address.
  - 14—Examinations in Medicine (First, Second, Third and Fourth Years) begin.
  - 16-Annual Convocation.

The oral, practical and clinical examinations in Arts and Science, Pharmacy, Medicine, Engineering and Architecture, and Agriculture and Home Economics will be held by arrangement of the Departments concerned in April or May prior to the opening of the written examinations or during their progress.

# THE UNIVERSITY OF MANITOBA

# HISTORICAL SKETCH

The University of Manitoba was established by Act of the Manitoba Legislature in 1877 "for the purpose (as the preamble states) of raising the standard of higher education in the Province and of enabling all denominations and classes to obtain academic degrees." The government of the University was vested in a Chancellor, a Vice-Chancellor and a University Council, with powers as a "body politic and corporate" to receive, hold and sell property, to arrange courses of study, to hold examinations and to grant degrees. The Act provided for the affiliation of Colleges and for the granting of degrees in Divinity by those Colleges to students who should have obtained recognized academic standing in Arts subjects. The Chancellor was to be appointed by the Lieutenant-Governor-in-Council, and the University Council was to consist of seven representatives from each of the affiliated Colleges, three from Convocation and two from the Board of Education of the Province.

The three Colleges already in existence in Manitoba were affiliated with the University at its inception. St. John's the Anglican institution, had been reorganized in 1866 by Bishop (afterwards Archbishop) Machray, who became in 1877 the first Chancellor of the University. St. Boniface had grown from a mission school early in the century to be the chief Roman Catholic College of the West. Manitoba College, in connection with the Presbyterian Church, had been organized in 1871. The Vice-Chancellor of the new University was the Hon. Joseph Royal; the Bursar was Mr. Duncan Macarthur; and the Registrar Mr. E. W. Jarvis.

Since 1877 five Colleges have been received into affiliation with the University. The Manitoba Medical College was affiliated in 1882, Wesley College was affiliated in 1888, the Manitoba College of Pharmacy in 1902, the Manitoba Agricultural College in 1907, and St. Paul's College in 1931.

In 1885 an agreement between the Dominion Government and the Province of Manitoba provided for an endowment not exceeding 150,000 acres of land for the University of Manitoba "for its maintenance as a University capable of giving proper training in the higher branches of education."

In 1900 an amendment to the University Act gave the University "power to give instruction and teaching in the several faculties and different branches of knowledge as may from time to time be directed by the Council of the University." The present site was granted by the Dominion Government, and the corner-stone was laid in 1900 by the King, then Duke of Cornwall and York. Four new chairs in the Natural and Physical Sciences were founded in 1904, and as well one in Mathematics and one in the combined subjects of Histology, Pathology and Bacteriology. The number of Science chairs was subsequently increased to six; Geology and Mineralogy, which at the first was combined in part with Botany and in part with Physics, being given independent status, and as well Zoology, which at first was attached to Physiology. A department of Civil Engineering was organized in 1907, and Departments of Electrical Engineering, Political Economy, English and History in 1909. Departments of Architecture, of

French and of German were created in 1913, and began their work in the fall of that year. In the fall of 1914 the following new departments were instituted: A department of Pharmacy, which took over the teaching in this subject formerly done by the Manitoba College of Pharmacy; a department of Mechanical Engineering; a department of Classics. In addition, the work of the departments of English, French, German, History and Political Economy, which had hitherto been confined to the subjects of the Third and Fourth Years in Arts, was extended to include those of the First and Second Years and the department of Mathematics, which had hitherto covered only the Second, Third and Fourth Years, assumed responsibility for the work of the First Year as well. The University thus came into the position of offering for the first time through its own faculty the full work of the course in Arts for the B.A. degree.

The affiliation of Manitoba Agricultural College with the University was terminated by an Act of the Provincial Legislature in 1912 but restored again in 1916.

The first President of the University, Dr. James A. MacLean, assumed office on January 1st, 1913.

By the University Amendment Act, 1917, there was introduced into the corporation a Board of Governors of nine members, appointed by the Lieutenant-Governor-in-Council for a period of three years, three retiring each year, and in this Board was vested "the government, conduct, management and control of the University," including its lands, investments, appointments, limits of instruction, etc. The Council of the University was continued, but with a reduction in the number of its members from seventy-two to twenty-eight and a limitation of the sphere of its activity to that of "general charge of the academic work of the University," within which range it is still subject to the plenary power vested in the Board of Governors. Its representative character is maintained as is shown by the following composition: The Chancellor, the President, four representatives from the faculty of the University, two representatives from Manitoba Agricultural College, one representative from Manitoba Medical College, one representative from the College of Physicians and Surgeons of Manitoba, six members to be appointed by the Lieutenant-Governor-in-Council, four representatives to be elected by convocation and two representatives from each of the affiliated Arts Colleges, St. Boniface, St. John's, Manitoba and Wesley. Definite legislative recognition is given by the practice of the submission annually to the Lieutenant-Governor-in-Council through the Minister of Education of a budget of "anticipated revenues and proposed expenditures" and of the appropriation by the Legislature of money for University expenditures.

During the session 1919-1920, an agreement was reached with the Faculty of Manitoba Medical College whereby that institution passed out of existence upon the assumption by the University of responsibility for the maintenance of medical teaching in an adequate manner. In pursuance of this arrangement a full Medical Faculty was appointed and a faculty organization completed.

Provision was also made for the teaching by the University of philosophy, including metaphysics, ethics and psychology, and a chair of Philosophy and Psychology was established.

The Board of Governors completed a reorganization of the University Faculty which became effective on June 1st, 1921. Three faculties were established, viz., the Faculty of Arts and Science, the Faculty of Engineering and Architecture, and the Faculty of Medicine, with a Dean of each Faculty. A General Faculty Council was also instituted.

On March 1st, 1924, by Act of the Manitoba Legislature, the administration of Manitoba Agricultural College was transferred to the Board of Governors of the University and it was arranged that in future the instructional work of the College should be carried on as a Faculty of Agriculture of the University, provision being made at the same time for the appointment of an Advisory Council for the purpose of relating the work in Agriculture to the needs of the people.

In November, 1929, the Legislature selected the site in Fort Garry, already occupied by the Manitoba Agricultural College since 1913, as the permanent site of the University. An Arts Building to accommodate Senior Division students was erected thereon during 1930-1931, and a Science Building during 1931-32. The Fort Garry site was occupied jointly by students of Agriculture and Home Economics and by students of the Senior Division in Arts and Science and post-graduate students during the session 1932-1933.

# COLLEGES AFFILIATED WITH THE UNIVERSITY

- St. Boniface College, St. Boniface, in connection with the Roman Catholic Church. Rector—Rev. Joseph Béliveau, S.J., St. Boniface College.
- St. John's College, Winnipeg, in connection with the Church of England. Warden—Rev. G. A. Wells, C.M.G., M.A., D.D., St. John's College.
- \*Manitoba College, Winnipeg, in connection with the United Church of Canada. Principal—Rev. John MacKay, M.A., D.D., Manitoba College.
- \*Wesley College, Winnipeg, in connection with the United Church of Canada. President—Rev. J. H. Riddell, B.A., D.D., LL.D., Wesley College.
- Manitoba Law School, Winnipeg. Chairman of Trustees—Hon. H. A. Robson, K.C., LL.D., Law Courts.
- St. Paul's College, Winnipeg, in connection with the Roman Catholic Church. Rector—Rev. John S. Holland, B.A., St. Paul's College.

<sup>\*</sup>While Manitoba College and Wesley College still retain their separate charters and separate Boards of Directors, they are at present administered by a Joint Executive Committee and have a Joint Arts Faculty, a Joint Theological Faculty and a Matriculation Department and carry on their work under the name of United Colleges.

Visitor

His Honour James D. McGregor
Lieutenant-Governor of Manitoba

Chairman Board of Governors D'ALTON C. COLEMAN, LL.D.

Chancellor
Most Rev. S. P. Matheson, D.D., D.C.L., LL.D.

Vice-Chancellor
RIGHT REV. MSGR. A. CHERRIER, LL.D.

President

James A. MacLean, Ph.D., LL.D.

Registrar
W. J. Spence, B.A., LL.D.

Assistant Registrar W. B. H. TEAKLES, B.A.

Bursar F. W. CRAWFORD, B.S.A.

Assistant Bursar
C. G. FIELDHOUSE

# **BOARD OF GOVERNORS, 1933-1934**

# Chairman D'ALTON C. COLEMAN, LL.D.

# Secretary

Appointed for a three-year term from May 1st, 1933:

Honorable A. K. Dysart, M.A.
D'Alton C. Coleman, LL.D.
Frank W. Nicks, Esq.

Appointed for a two-year term from May 1st, 1933:

HJALMAR A. BERGMAN, K.C.

JULIUS E. LEHMANN, M.B., M.R.C.S., L.R.C.P.

PAUL F. BREDT, B.S.A.

Appointed for a one-year term from May 1st, 1933:

MRS. MARY SPEECHLY.

CHRISTOPHER A. ADAMSON, M.A.

\*FREDERICK W. CRAWFORD, B.S.A.

Elected by the Alumni for a three-year term from June 1st, 1933: DAVID M. DUNCAN, M.A., LL.D.

Elected by the Alumni for a two-year term from June 1st, 1933: Mrs. Elinor M. Wheeler, B.A.

Elected by the Alumni for a one-year term from June 1st, 1933: Homer S. Robinson, M.A., LL.B.

Members ex officio:

Most Rev. S. P. Matheson, D.D., D.C.L., LL.D. Chancellor.

James A. MacLean, Ph.D., LL.D., President.

<sup>\*</sup>Resigned, August 15th, 1933.

# COUNCIL OF THE UNIVERSITY, 1932-1933

Chairman:

Most Rev. S. P. Matheson, D.D., D.C.L., LL.D., Chancellor.

Vice-Chairman:

RIGHT REV. MSGR. A. A. CHERRIER, LL.D., Vice-Chancellor.

President of the University:

JAMES A. MACLEAN, PH.D., LL.D.

Appointed by the General Faculty Council of the University:

W. TIER, M.A.

E. P. Fetherstonhaugh, M.C., B.Sc.

A. T. MATHERS, M.D., C.M.

W. C. McKillican, B.S.A.

M. A. PARKER, B.Sc., LL.D.

Mrs. L. C. Duncan, Ph.B., M.A.

Appointed by the Lieutenant-Governor-in-Council:

ROBERT FLETCHER, B.A., LL.D.

Mrs. Margaret S. McWilliams, M.A.

WILLIAM A. McIntyre, B.A., LL.D.

G. J. REEVE, M.A.

ELIZABETH S. COLWELL, B.A.

ROBERT MILNE, B.S.A.

Elected by the Graduates of the University in Arts and Science:

DAVID M. DUNCAN, M.A., LL.D. EDWARD B. PITBLADO, B.A., LL.B.

Elected by the Graduates of the University in Engineering and Architecture: A. J. Taunton, B.C.E.

Elected by the Graduates of the University in Medicine:

J. D. ADAMSON, B.A., M.D., M.R.C.P. (Edin.).

Elected by the Graduates of the University in Agriculture and Home Economics: WILLIAM R. LESLIE, B.S.A.

Elected by the Members of the Law Society of Manitoba:

CHARLES RHODES SMITH, B.A., LL.B.

Appointed by St. Boniface College:

RIGHT REV. MSGR. A. A. CHERRIER, LL.D.

REV. H. BOURQUE, S.J., LL.D.

Appointed by St. John's College:

REV. G. A. WELLS, C.M.G., M.A., D.D.

REV. E. A. W. GILL, M.A., D.D.

Appointed by Manitoba College:

REV. J. MACKAY, M.A., D.D.

REV. A. B. BAIRD, M.A., D.D., LL.D.

Appointed by Wesley College:

REV. J. H. RIDDELL, B.A., D.D., LL.D.

J. K. Sparling, M.A., LL.B.

Appointed by the College of Physicians and Surgeons:

WILLIAM TURNBULL, M.D.

Appointed by St. Paul's College:

REV. C. B. COLLINS, B.A., LL.D.

JAMES MCKENTY, M.D., C.M.

# STANDING COMMITTEES OF THE UNIVERSITY COUNCIL, 1932-33

Board of Studies: President MacLean (Chairman), Dean Tier, Dean Fetherstonhaugh, Dean Mathers, Professor M. A. Parker, Rev. Warden Wells, Rev. Father Bourque, Rev. Dr. MacKay, Rev. Dr. Riddell, Mrs. L. J. C. Duncan, Dr. Robert Fletcher, Dr. W. A. McIntyre, Dr. D. M. Duncan, Rev. Dr. C. B. Collins, Dr. W. J. Spence, W. B. H. Teakles (Secretary).

Library Committee: (Appointed by the General Faculty Council), Professor G. R. Bisby, Professor A. H. R. Buller, Professor F. W. Clark, Dean E. H. Coleman, Professor H. N. Fieldhouse, Professor J. N. Finlayson, Professor O. S. Waugh, Professor H. W. Wright, Professor J. F T. Young.

Committee on Extension Work: The Chancellor (Chairman), President MacLean, Dr. Robert Fletcher, Mrs. M. S. McWilliams, Dean McKillican, Rev. Dr. Baird, W. R. Leslie, G. J. Reeve, Robert Milne, Dr. W. J. Spence, Professor W. T. Allison, J. A. M. Edwards (Secretary).

Committee on Honorary Degrees: The Chancellor (Chairman), President MacLean, Rev. Dr. MacKay, Rev. Dr. Riddell, Rev. Father Bourque, Dr. W. A. McIntyre, Dr. Robert Fletcher, Dr. D. M. Duncan, Dean Tier, Dean Fetherstonhaugh, Dean McKillican, Dean Mathers, Dean Coleman, Mrs. M. S. McWilliams, Dr. W. J. Spence (Secretary).

Committee on Alumni Relations: E. B. Pitblado, Miss E. S. Colwell, W. R. Leslie, A. J. Taunton, C. R. Smith, Dr. J. D. Adamson, J. K. Sparling,

Dr. W. J. Spence, D. Harry Young, H. D. Barbour.

Committee on Khaki University Scholarships: Dean E. P. Fetherston-haugh (Chairman), President MacLean, Dr. D. M. Duncan, Rev. Warden Wells, Assistant Professor R. F. Argue, Professor N. R. Wilson, Dr. W. J. Spence, Dr. H. P. Armes (Secretary).

Committee on University Travelling Fellowships: The Chancellor (Chairman), President MacLean, Dean Tier, Professor F. W. Clark, Professor M. A. Parker, Rev. Canon Gill, Dean Fetherstonhaugh, Mrs. U. N. Macdonnell,

Dr. W. J. Spence (Secretary).

Representatives on Manitoba Examination Board: President MacLean, Dr. W. J. Spence, W. B. H. Teakles.

Representatives on the Board of Manitoba Law School: President Mac-Lean, Dr. W. J. Spence.

Representative on the General Council of the University of Manitoba Students' Union: Dr. W. J. Spence.

Representative on the Athletic Directorate of the University of Manitoba Students' Union: Professor O. T. Anderson.

Representative on the Social Committee of the University of Manitoba Students' Union: Mrs. U. N. Macdonnell.

Representative on the Executive of the Debating Union of the University of Manitoba Students' Union: Professor H. Noel Fieldhouse.

Representative on the Executive of the Dramatic Society of the University of Manitoba Students' Union: Professor A. L. Phelps.

Representative on the Executive of the Glee Club of the University of

Manitoba Students' Union: Professor A. J. Perry.

Representatives on the Board of the Winnipeg General Hospital: President MacLean, Dean Fetherstonhaugh, J. K. Sparling.

# SPECIAL

Committee on Standards of Admission and Undergraduate Work: The Chancellor (Chairman), President MacLean, Mrs. M. S. McWilliams, Dr. Robert Fletcher, Dr. D. M. Duncan, Dr. Henri Bourque, Rev. Warden Wells, Rev. Dr. John MacKay, Rev. Dr. J. H. Riddell, C. Rhodes Smith, Dean Tier, Professor M. A. Parker, Dr. W. J. Spence (Secretary).

# **GENERAL FACULTY COUNCIL, 1932-1933**

Chairman

PRESIDENT JAMES A. MACLEAN

Secretary

W. J. SPENCE, REGISTRAR

Dean of Women Students Mrs. U. N. MACDONNELL

# Faculty of Arts and Science

DEAN WILLIAM TIER	PROFESSOR N. R. WILSON
PROFESSOR FRANK ALLEN	PROFESSOR H. W. WRIGHT
Professor A. H. R. Buller	Professor R. C. Lodge
Professor M. A. Parker	Professor L. A. H. Warren
Professor A. B. Clark	Professor R. A. Wardle
Professor W. F. Osborne	Professor J. S. DeLury
Professor J. H. Heinzelmann	Professor A. J. Perry
Professor H. E. Bletcher	Professor W. T. Allison
Professor F. W. Clark	Professor H. N. Fieldhouse

# Faculty of Engineering and Architecture

Dean E. P. Fetherstonhaugh	PROFESSOR N. M. HALL
Professor J. N. Finlayson	PROFESSOR M. S. OSBORNE

# Faculty of Medicine

DEAN A. T. MATHERS	Professor V. H. K. Moorhouse
PROFESSOR WILLIAM BOYD	Professor C. R. Gilmour
Professor B. J. Brandson	Professor F. T. Cadham
Professor A. T. Cameron	Professor A. J. Douglas
Professor D. S. MacKay	PROFESSOR T. HERBERT BELL
Professor R. G. Inkster	Professor G. W. Fletcher
PROFESSOR	O BIORNSON

# Faculty of Agriculture and Home Economics

DEAN W. C. McKillican	PROFESSOR R. W. BROWN
Mrs. L. J. C. Duncan	PROFESSOR F. W. BRODRICK
Professor V. W. Jackson	Professor G. L. Shanks
Professor G. W. Wood	Professor G. R. Bisby
Professor G. P. McRostie	Professor A. Savage
Professor A. V. MITCHENER	Professor W. F. Geddes
Professor M. C. Herner	Professor H. C. Grant

# OFFICERS OF ADMINISTRATION, 1933-1934

President	JAMES A. MACLEAN, PH.D., LL.D.
Registrar	
	W. B. H. TEAKLES, B.A.
Bursar	F. W. CRAWFORD, B.S.A.
Assistant Bursar	C. G. Fieldhouse
Dean of Faculty of Arts and Science.	W. Tier, M.A.
Dean of Faculty of Engineering and	
Architecture	E. P. FETHERSTONHAUGH, M.C., B.Sc.
Dean of the Faculty of Medicine	A. T. Mathers, M.D., C.M.
Secretary of the Faculty of Medicine	A. N. MACLEOD, B.A., M.D., C.M.
Dean of Faculty of Agriculture and	
Home Economics	ALFRED SAVAGE, B.S.A., D.V.M.

# MEMBERS OF INSTRUCTIONAL STAFF IN ARTS, SCIENCE, PHARMACY, ENGINEERING, ARCHITECTURE, AGRICULTURE AND HOME ECONOMICS, 1933-1934

HOME ECONOMICS, 1933-1934
ALLEN, FRANK, M.A. (U.N.B. and Cornell), Ph.D. (Cornell), LL.D., F.R.S.C.  Professor of Physics
Allison, William Talbot, M.A. (Toronto), Ph.D. (Yale)  Professor of English 600 Gertrude Ave.
Anderson, William Abraham, M.Sc. (Man.), M.A. (Chicago)  Assistant Professor of Physics
Argue, Robert Fletcher, M.A. (Man.)  Assistant Professor of English
ARMES, HENRY P., B.Sc. (Leeds), Ph.D. (Strassburg)  Associate Professor of Chemistry Suite C, Milan Apartments
Ballu, Celine A., M.A. (Wisconsin)  Lecturer in French
BISBY, GUY RICHARD, B.S. (South Dakota), M.A. (Columbia), Ph.D. (Minnesota)  Assistant Professor of Botany
BLETCHER, HENRY E., B.Sc., Phar. (Man.), F.C.I.C.  Professor of Pharmacy and Pharmaceutical Chemistry
Brodrick, Frederick William, B.S.A. (Toronto)  Professor of Horticulture and Forestry
Brown, James McCulloch, B.S.A. (Toronto), M.S. (Minnesota)  Associate Professor of Animal Husbandry 124 Buxton Road
Brown, Reuben Wesley, B.S.A. (Toronto), M.S. (Iowa State College)  Professor of Dairy Husbandry
Brownell, George McLeod, M.Sc. (Man.), Ph.D. (Minnesota) Assistant Professor of Geology and Mineralogy

Buller, A. H. REGINALD, B.Sc. (Lond.), Ph.D. (Leipzig), D.Sc. (Birm.),
LL.D., F.R.S.C., F.R.S.  Professor of Botany Absent on leave
CAMPBELL, ALAN NEWTON, M.Sc. (Lond.), Ph.D. (Lond.), D.Sc. (Aber-
deen), F.I.C.
Assistant Professor of Chemistry
CLARK, ARCHIBALD BROWN, M.A. (Edin.), F.S.S.
Professor of Political Economy Ste. 3B, Hampson Court
CLARK, FREDERICK WILLIAM, B.A. (Man.), Ph.D. (Chicago)  Professor of Latin and Greek
DeLury, Justin S., B.A. (Toronto), Ph.D. (Minnesota), F.R.S.C.  Professor of Geology and Mineralogy
Dorsey, John W., E.E. (Lehigh), A.M.E.I.C.  Assistant Professor of Electrical Engineering University of Manitoba
Duncan (Mrs.), Lottie Chapman, Ph.B. (Chicago), M.A. (Manitoba)  Director of Home Economics
ELLIS, JOSEPH HENRY, B.S.A. (Man.), M.S. (Minnesota)  Associate Professor of Agronomy
FETHERSTONHAUGH, EDWARD P., M.C., B.Sc. (McGill), M.E.I.C.  Professor of Electrical Engineering 801 Dorchester Ave.
FIELDHOUSE, H. NOEL, M.A. (Sheffield), M.A. (Oxon.)  Professor of History
FINLAYSON, JOHN N., M.Sc. (McGill), M.E.I.C., M. Am. Soc. C.E.  Professor of Civil Engineering 271 Harvard Ave.
GEDDES, WILLIAM FINDLAY, B.S.A., M.A. (Toronto), M.S., Ph.D. (Minnesota)  Associate Professor of Chemistry 187 Baltimore Road
GRANT, HENRY CLARK, B.S.A., M.A. (Man.), Ph.D. (Stanford)  Assistant Professor of Economics815 Oakenwold Ave.
GROFF, CLARA LOUISE, B.S. (Columbia)  Lecturer in Clothing and Textiles
HALL, NORMAN M., O.B.E. (Mil.), B.Sc. (McGill), M.E.I.C., M.A.S.M.E.  Professor of Mechanical Engineering 22 Dundurn Place
Heinzelmann, Jacob Harold, B.A. (Illinois), Ph.D. (Chicago)  Professor of German Language and Literature880 Grosvenor Ave.
Herriot, George H., B.Sc. (Queen's), D. and M.L.S., M.E.I.C.  Associate Professor of Civil Engineering 325 Waverley St.
HERNER, MILTON CHRISTIAN, B.S.A. (Toronto), M.S. (Cornell)  Professor of Poultry Husbandry
Hiebert, Paul G., B.A. (Man.), M.A. (Toronto), M.Sc., Ph.D. (McGill), F.C.I.C.
Assistant Professor of Chemistry
HILTZ, MARY CATHERINE, B.S. (Columbia), M.A. (Toronto)  Assistant Professor of Nutrition
Hopper, Clark Reid, B.A., M.A. (Man.)  Assistant Professor of English
Howe, Joseph E., B.A. (Acadia and Yale), M.A. (Acadia)
Assistant Professor of History 72 Chestnut St.

Hugill, William Meredith, B.A. (Toronto)
Assistant Professor of Latin and Greek University of Manitoba
JACKSON, VINCENT WILLIAM, B.A. (Queen's), M.S. (Minnesota)  Assistant Professor of Zoology737 McMillan Ave.
James, Norman, B.S.A. (Toronto), M.S. (Iowa State College)  Assistant Professor of Bacteriology
Jamieson, Morley Craig, B.S.A. (Toronto)  Lecturer in Bacteriology841 Jubilee Ave.
JOHNSON, SKULI, M.A. (Man.),  Assistant Professor of Latin and Greek 176 Lenore St.
JONES, CYRIL MEREDITH, M.A. (Wales)  Assistant Professor of French
Jones, Reginald F., M.A. (Liverpool)  Assistant Professor of Political Economy 981 McMillan Ave.
Kirk, Stuart Raeburn, B.Sc., Ph.D. (St. Andrew's)  Assistant Professor of Geology
Lecturer in Mathematics (Man.)
Lodge, Rupert C., M.A. (Oxon.)  Professor of Logic and History of PhilosophySte. 15, Fairmont Aparts.
Lowe, Charles W., M.Sc. (Birm.)  Assistant Professor of Botany
MacDonald, Albert E., M.Sc. (McGill)  Associate Professor of Civil Engineering
Macdonald, Patrick Anderson, M.Sc. (Man.), Ph.D. (Man.)  Assistant Professor of Physics  Victor St.
Macfarlane, Ronald Oliver, M.A. (Queen's), A.M. (Harvard)  Assistant Professor of History
Mainland, William Faulkner, M.A. (Edin.)  Assistant Professor of German
McClung, Robert K., M.A. (McGill), B.A. (Cantab.), D.Sc. (McGill), F.R.S.C.
Associate Professor of Physics 88 Chestnut St.
McDougall, Dougald, M.Sc. (Man.), F.C.I.C.  Assistant Professor of Pharmacy and Pharmaceutical Chemistry  279 Inglewood St.
McFadden, Eleanor Gertrude, B.S. (Iowa State College)  Lecturer on Clothing and TextilesSte. 5, Bryce Apartments
McLauchlin, Florence Elizabeth Margaret, B.Sc., H.Ec. (Man.)  Lecturer in Nutrition
McRostie, Gordon Peter, B.S.A. (Toronto), M.S.A., Ph.D. (Cornell)  Professor of AgronomyChurch Ave.
MILNE, THESSALON HERBERT, M.A. (Toronto)  Assistant Professor of Mathematics
MITCHENER, ALVIN VALENTINE, B.A. (McMaster), B.S.A. (Toronto), M.Sc. (Man.)
Professor of Entomology 911 Windermere Ave.

MOFFATT, ROBERT W., B.A.Sc. (Toronto), A.M.E.I.C.  Associate Professor of Civil Engineering 900 Jessie Ave.
Moxon, Mary Caroline, Ph.B. (Chicago), M.A. (Man.)  Lecturer in Home Economics
Neave, Ferris, M.Sc. (Manchester) Assistant Professor of Zoology
OSBORNE, MILTON S., B.Arch. (Ohio), B.Arch., M.Sc. (Columbia), M.A.I.A., M.R.A.I.C., M.T.P.I.C.
Professor of Architecture University of Manitoba
Osborne, William Frederick, M.A. (Toronto), Officier d'Académie  Professor of French Language and Literature
Parker, Matthew A., B.Sc. (Glasgow), LL.D., F.I.C., F.C.I.C., F.R.S.C.  Professor of Chemistry
Professor of Chemistry 365 Waverley St.  Perry, Aaron Jenkins, M.A. (Acadia and Yale)  Professor of English 61 Home St.
RICHARD, MARCEL EDMOND JEAN, B.A. (Alta.)  Lecturer in French
RIDDELL, WILLIAM FORREST, B.Sc. (Man.)  Assistant Professor of Civil Engineering 42 Dundurn Place
ROBERTS, HERBERT F., B.A., M.Sc. (Kansas), F.A.A.S.  Assistant Professor of Botany
ROBERTS, JESSIE S., B.A. (Toronto)  Instructor in Chemistry University of Manitoba
Russell, John A., B.Arch. (Mass. Inst. of Tech.)  Assistant Professor of Architecture
SAUNDERS, DORIS BOYCE, M.A. (Man.)  Lecturer in English
SAVAGE, ALFRED, B.S.A. (McGill), D.V.M. (Cornell), M.R.C.V.S.  Professor of Bacteriology and Animal Pathology 745 Somerset Ave.
SHANKS, GRAHAM LAWSON, B.S.A. (Man.), M.S. (Iowa State College)  Associate Professor of Civil Engineering
South, (Mrs.) Jean  Lecturer in Household Art
Stoughton, Arthur A., Ph.B. (Columbia), M.R.A.I.C., M.S.B.A.A.  Professor Emeritus of Architecture
Tier, William, M.A. (Toronto)  Professor of Mathematics
Waines, William John, M.A. (Man.)  Lecturer in Political Economy
Wardle, Robert Arnold, M.Sc. (Manchester)  Professor of ZoologySte. 5, 812 Grosvenor Ave.
Warren, Lloyd A. H., M.A. (Queen's), Ph.D. (Chicago), F.R.A.S., A.A.S., A.A.I.A., F.C.A.S.  Professor of Mathematics 64 Niagara St.
WHEELER, A. LLOYD, B.A. (Brit. Col.), M.A. (Toronto), Ph.D. (Wisconsin)  Assistant Professor of English

WILSON, NORMAN RICHARD, M.A. (Toronto), Ph.D. (Chicago)  Professor of Mathematics 989 Grosvenor Ave.
Wood, Gordon William, B.S.A. (McGill), M.S. (Wisconsin)  Professor of Animal Husbandry
WRIGHT, HENRY WILKES, B.A. (Cornell), Ph.D. (Cornell)  Professor of Philosophy and Social Ethics
Young, John Francis Todd, M.A., Ph.D. (Toronto)  Associate Professor of Physics 900 McMillan Ave.

# SESSIONAL APPOINTMENTS FOR 1932-1933

Anna C. Jones (Mrs.), B.A. (Man.)	Assistant in German
C. C. Neufeld, B.Sc. (Man.)	Demonstrator in Botany
Adele V. Moyse, B.Sc. (Man.)	Demonstrator in Botany
G. W. F. Brisbin, B.Sc. (Man.)	Student Assistant in Botany
W. B. Doerksen	Student Assistant in Botany
GENEVIEVE D. IRWIN	
ABRAHAM H. NEUFELD	Student Assistant in Botany
C. A. AYRE, B.Sc. (Man.)	Student Assistant in Chemistry
L. G. Bragg	
EDITH M. BROWN, B.Sc. (Man.)	Student Assistant in Chemistry
H. D. CARTER, M.Sc. (Man.)	Student Assistant in Chemistry
H. COHEN, B.Sc. (Man.)	Student Assistant in Chemistry
Е. J. R. Соок, В.Sc. (Man.)	Student Assistant in Chemistry
K. W. Downes, B.Sc. (Man.)	
H. G. P. Johannson	Student Assistant in Chemistry
S. A. Johnston, B.Sc. (Man.)	Student Assistant in Chemistry
Margaret H. Lee	Student Assistant in Chemistry
C. S. Samis, B.Sc. (Man.)	Student Assistant in Chemistry
L. SLOTIN, B.Sc. (Man.)	Student Assistant in Chemistry
A. S. Dawson, B.Sc. (Man.)	Student Demonstrator in Geology
J. Spivack, B.Sc. (Man.)	Student Demonstrator in Geology
C. W. Collins, B.Sc. (Man.)	Student Demonstrator in Geology
G. M. Proudfoot	Student Demonstrator in Geology
E. M. CAMPBELL, B.Sc. (Man.)	
Sigfus V. Gillis, B.A. (Man.)	
A. A. Koffman, B.Sc. (Man.)	Demonstrator in Physics
J. W. Lockhart, B.A. (Man.)	Demonstrator in Physics
E. H. Denike, B.Sc. (Man.)	
Herman Johnson	
G. H. Josie, B.Sc. (Man.)	
W. E. TURNBULL, B.A. (Man.)	
RUTH M. WHITE	Student Assistant in Physics
C. K. Gunn, M.Sc. (Man.)	
J. A. McLeod, B.Sc. (Man.)	Demonstrator in Zoology

# **UNIVERSITY EXAMINERS, 1932-1933**

# ARTS AND SCIENCE AND LATIN PHILOSOPHY

EXAMINERS:

Classics: Professor F. W. Clark, Asst. Professors Hugill and Johnson, Very Rev. Dean Matheson (St. John's), Rev. Dr. Riddell (Wesley), Associate Professor W. Kirkconnell (Wesley), Rev. Raymond Murphy (St. Paul's). Latin Philosophy—Rev. G. Desjardins (St. Boniface).

Biblical Greek, Hebrew, Biblical Literature and Religious Education: Very Rev. Dean Matheson (St. John's), Chairman of General Committee; Professor E. Guthrie Perry (Manitoba), Chairman Hebrew Sub-Committee; Professor G. B. King (Wesley), Chairman Biblical Greek and Biblical Literature Sub-Committee; Professor C. W. Keirstead (Wesley), Chairman Religious Education Sub-Committee (English-speaking students); Rev. Dr. Riddell (Wesley), Rev. Dr. Baird (Manitoba), Rev. Warden Wells (St. John's), Rev. Dr. MacKay (Manitoba), Rev. H. G. G. Herklots (St. John's). Latin Philosophy—Rev. H. Schelpe (St. Boniface).

English: Professors Perry and Allison, Rev. Dr. E. A. W. Gill (St. John's), Assistant Professor Argue, Professor A. L. Phelps (Wesley), Associate Professor W. Kirkconnel (Wesley), Assistant Professor A. L. Wheeler, Miss Doris B. Saunders, Mr. R. M. Macdonnell (St. Paul's). Latin Philosophy—Rev. G. Desjardins (St. Boniface).

French: Professor Osborne, Mr. A. D. Baker (St. John's), Assistant Professor Evans, Assistant Professor C. Meredith-Jones, Mlle. C. A. Ballu, Miss E. D. Bowes (Wesley), Mr. M. E. J. Richard, Dr. Victor Leathers (Wesley), Mr. Victor Bonin (St. Paul's). Latin Philosophy—Rev. P. Gauthier (St. Boniface).

German: Professor Heinzelmann, Assistant Professor W. F. Mainland, Mrs. R. F. Jones, Mr. A. D. Baker (St. John's), Miss Gladys Pettingell (Wesley).

Philosophy: Professors Wright and Lodge, Rev. J. D. Fleming (Manitoba), Rev. J. O. Murray (St. John's), Rev. Dr. James Elliott (Wesley), Dr. C. B. McCullough (St. Paul's), Mr. David Owens (Wesley), Rev. Dr. C. B. Collins. Latin Philosophy—Rev. H. Schelpe (St. Boniface).

Political Economy: Professor A. B. Clark, Rev. J. O. Murray (St. John's), Assistant Professor Jones, Professor L. W. Mossit (Wesley), Mr. W. J. Waines.

Sociology: Rev. Dr. Riddell (Wesley), Assistant Professor Jones.

History: Professor Fieldhouse, Rev. Dr. E. A. W. Gill (St. John's), Assistant Professor J. E. Howe, Assistant Professor R. O. MacFarlane, Professor A. R. M. Lower (Wesley), Rev. H. G. G. Herklots (St. John's), Mr. J. W. Pickersgill (Wesley), Mr. J. B. Ratchford (St. Paul's). Latin Philosophy—Rev. P. Gauthier (St. Boniface).

Mathematics and Astronomy: Professors Wilson, Warren and Tier, Professor J. F. Cross (St. John's), Professor O. T. Anderson (Wesley), Assistant Professor T. H. Milne, Mr. J. W. Lawson, Mr. L. F. S. Ritcey (Wesley), Rev. R. Murch (St. Paul's). Latin Philosophy—Rev. A. Chicoine (St. Boniface).

Physics: Professor Allen, Associate Professor McClung, Professor J. F. Cross (St. John's), Associate Professor Young, Assistant Professor W. A. Anderson, Mr. R. L. Betts (Wesley), Rev. J. E. Campbell (St. Paul's). Latin Philosophy—Rev. A. Chicoine (St. Boniface).

Botany: Professor Buller, Assistant Professors Roberts and Lowe.

Geology and Mineralogy: Professor DeLury, Assistant Professor S. R.

Kirk, Mr. F. D. Shepherd.

Chemistry: Professor Parker, Associate Professor Armes, Assistant Professors P. G. Hiebert and A. N. Campbell, Mr. R. L. Betts (Wesley), Dr. H. H. Saunderson, Mr. Thomas Boon (St. John's), Rev. J. E. Campbell (St. Paul's). Latin Philosophy—Rev. A. Chicoine (St. Boniface).

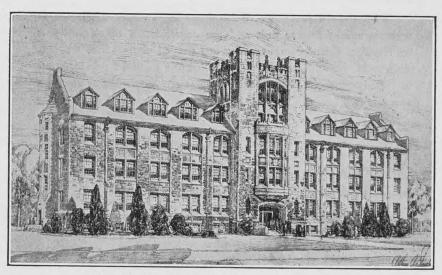
Zoology: Professor Wardle, Assistant Professor Riley, Assistant Professor

Ferris Neave. Latin Philosophy-Rev. A. Chicoine (St. Boniface).

Pharmacy: Professor Bletcher, Assistant Professor D. DcDougall.

Associate Examiners:

JOCIATE EXAMINERS.	
Mr. George Amyot (St. Paul's)	Mathematics
Mr. E. M. Campbell	Physics Physics
Rev. J. E. Campbell (St. Paul's)	Political Economy
Rev. Dr. C. B. Collins	
Rev. A. R. Cragg (Wesley)	
Mr. S. V. Gillis	Physics
Mr. C. K. Gunn	Zoology
Mr. A. A. Koffman	Physics
Mr. J. W. Lockhart	
Rev. R. Murch (St. Paul's)	Chemistry
Mr. David Owens (Wesley)	English
Miss Sybil Preudhomme (St. John's)	Classics and French
Rev. L. A. C. Smith (St. John's)	
Rev. A. Wilbraham (St. John's)	Physics



NEW ARTS BUILDING ON THE FORT GARRY SITE (Senior Division Classes in Arts are offered here.)

# LOCATION OF INSTRUCTION

For the session 1933-1934, classes of the Junior Division in Arts and Science (including the Pre-Engineering Year, the Pre-Architecture Year, the two Pre-Medical Years, etc.) will be given in the Broadway building as heretofore. The work of the Senior Division (Third and Fourth Years in the General Course, Fourth and Fifth Years in the Honors Courses and the Post-Graduate Courses) will be offered on the Fort Garry site.

There will be available in the Manitoba Union, the former students' residence or dormitory building of Manitoba Agricultural College, living accommodation for five hundred students. For particulars as to rates and routine of application for admission, see page 133.

Those who will reside at their homes in Winnipeg will find a much improved transportation service available for them from all parts of the city and suburbs.

With the disappearance of Manitoba Agricultural College as a separate administrative unit and the consolidation of all activities on the Fort Garry campus under one unified control and a steady growth in the number of students using the facilities provided, the new University site will speedily become the centre of student life and affairs.

# **CURRICULA IN ARTS**

The University of Manitoba confers two degrees in Arts, viz.: Bachelor of Arts (B.A.) and Master of Arts (M.A.). The requirements from those who would proceed in course to these degrees are set forth below.

# I—BACHELOR OF ARTS

### Matriculation

The requirements for Matriculation for Arts are set forth in detail in the Programme of Studies for Secondary Schools of the Department of Education. No applicant may be received as a regular student of the Junior Division in Arts and Science who carries any condition from Matriculation (the work of Grades IX, X and XI in the High Schools as prescribed for University entrance). Students who have fully completed a course recognized by the Department of Education for purposes other than University entrance, such as the Normal School Entrance course or the Practical Arts course, and whose deficiencies on the Matriculation course do not exceed two conditions may be accepted as students of the Junior Division subject to such limitation of their first session's program in the Junior Division as may be ordered by the Committee on Students' Courses and with the requirement of approved concurrent instruction in the Matriculation work as yet uncompleted.

# Undergraduate Course

A Student who has fulfilled the requirements for Arts Matriculation may proceed to the Pass or General Bachelor of Arts degree by completing satisfactorily, subject to the rules and regulations set forth hereafter, forty units\* of credit in the Junior Division in Arts and Science and thirty-two units of credit in the Senior Pass Division in Arts and Science. He may proceed to the Honors Bachelor of Arts degree by completing satisfactorily, subject to the rules and regulation set forth hereafter, forty units of credit in the Junior Division in Arts and Science and forty-eight units of credit in the Senior Honors Division in Arts. The work for the Pass or General degree is normally done in four annual sessions and that for the Honors degree in five, two being given to the Junior Division, and two or three, as the case may be, to the Senior Division.

# Junior Division in Arts and Science

The work of the Junior Division in Arts and Science comprises the following courses from which work must be completed by the student proceeding to the Bachelor of Arts degree, representing, in the aggregate, forty units of credit. This work must be chosen subject to the restrictions set out below and the requirements with regard to prerequisite courses found at the opening of the respective departmental announcements. The Roman numeral

<sup>\*</sup>A unit is a body of work to which is assigned for instructional purposes one hour of lecture or other class room exercise per week or one continuous laboratory period of two or three hours per week, throughout an entire session, or the equivalent.

after the name of a subject indicates the year of a student's course in which it is normally taken and the Arabic numeral in parentheses thereafter the value of the subject in units of credit towards a degree.

Required subjects (totalling twenty units)-

1. English I (4), English II (4).

2. Mathematics I (4).

3. French I (4), French II (4); or

German I (4), German II (4); or Latin I (4), Latin II (4); or

Classical Greek II (4), Classical Greek IIA (4); or

Biblical Greek I (4), Biblical Greek II (4).

(The language elected under 3 must be a language already taken for Ma'riculation credit. In the case of Biblical Greek I and II, Classical Greek must have been taken for Matriculation. Subject to the approval of the Board of Studies, Biblical Greek I may be substituted for French II or German II or Latin II or Classical Greek IIA, the prerequisite for Biblical Greek I being either Biblical Greek IA or Classical Greek I.)

Elective subjects (from which work of the value of twenty units must

be completed)-

(The language taken in 3 above is, of course, excluded from election here. Not more than 8 units of work may be chosen from the group: Physics II, Chemistry II, Botany II, Zoology II and Geology II.)

Biblical Greek IA (4), Biblical Greek I (4); Biblical Greek II (4) \*.

French I (4), French II (4);

German I (4), German IA (4), German II (4), German IIA (4)\*;

Classical Greek I (4), Classical Greek II (4), Classical Greek IIA;

Hebrew I (4), Hebrew II (4); Icelandic I (4), Icelandic II (4).

Latin I (4), Latin II (4).

History I (4).

History II (4).

Astronomy II (2).

Botany II (2), Botany IIM (2);

Chemistry I (4), Chemistry II (4), Chemistry IIM (4);\* Mechanical Drawing I (2), Architectural Drawing I (2);†

Geology II (2).

Mathematics IA or IIA (2), Mathematics II (4);

Physics I (4), Physics IIM (2); Physics II (4);\*

Zoology II (2), Zoology IIM (4);

Economics II (2);

Ethics II (2); \*\*

Logic II (2); \*\*

Psychology II (2); Music (4). \*\*\*

\*Only eight units may be taken in German or Chemistry or Physics or Biblical Greek or Classical Greek. Physics IIM may be elected only in the Pre-Medical Junior Division. See paragraph 5, pages 27-28.

†A student who elects Mechanical Drawing I or Architectural Drawing I must also take Mathematics IA. Only one of these two courses in Drawing may be taken.

\*\*A student may elect one of Ethics II and Logic II but not both.

\*\*\*The prerequisite for Music is standing obtained in the Music Option in Grade XI, or

a satisfactory equivalent. Students electing Music in the Junior Division are required to take the work of the fifth or a higher year of the Music Option Syllabus of the Music Option Board concurrently with the other subjects of their programme of the session. Theoretical and practical tests will be given in connection with the April examinations.

The program of work of each student must be approved by the Board of Studies of the University through its Committee on Students' Courses. The normal program for each session is work representing twenty units of credit.

The student should also bear in mind that he will not be accorded the units of credit towards a degree represented by any particular subject until all the requirements with respect to class work, laboratory work and examinations pertaining to that subject have been fully completed. He is referred to the regulations governing failures, supplemental examinations and summer school work for information as to the way in which deficiencies can be removed.

The following considerations should be kept in view by students in considering their choices of subjects in the Junior Division:

- 1. Strict regard must be had for the prescription of prerequisites for the various subjects at the opening of the respective departmental announcements.
- 2. The Committee on Students' Courses will expect that unless in exceptional cases a subject will not be elected in any year other than the one in which, according to its designation, it is "normally taken."
- 3. A departure from this rule is found in the practice of recognizing a student's right in one year only of the Senior Pass Division or in the first year of the Senior Honors Division to elect as *one* of his four subjects a four-unit subject of the Junior Division, provided of course that he secures the approval of the Committee on Students' Courses.
- (4) (a) A student desiring to qualify for entrance upon the course for the degree in Civil Engineering or in Electrical Engineering, may if fully matriculated, do so upon completing twenty units in the Junior Division in Arts and Science upon the following course: English I, Mathematics I, Mathematics IA, Mechanical Drawing I, Chemistry I, and one of French I, German I, Latin I, Greek II. The language elected must have been taken for Matriculation.
- (b) A student desiring to qualify for entrance upon the course for the degree in Architecture may, if fully matriculated, do so upon completing twenty units in the Junior Division in Arts and Science upon the following course: English I, Mathematics I, Mathematics IA, Architectural Drawing I, Physics I and French I.
- 5. A student desiring to qualify for entrance upon the course for the degree of Medicine may, if fully matriculated, satisfy the further academic requirements by completing forty units in the Junior Division in Arts and Science upon the following courses\*†: English I, English II; Mathematics I;

<sup>†</sup>By arrangement with the University of Toronto the completion of this course will also be accepted for admission to the Second Year of its five-year course in Dentistry, leading to the degree of Doctor of Dental Surgery. For further details consult the announcement of the Faculty of Dentistry of the University of Toronto.

<sup>\*</sup>In general any standard course, beyond matriculation, given in a recognized University and accepted by it for two years' credit toward a B.A. or a B.Sc. degree, is considered adequate for purposes of admission to the course in Medicine, provided the minimum requirements laid down above in Physics, Chemistry, Botany and Zoology are fully met. Students taking Grade XII with the study of Medicine in view, should elect the language, preferably a modern one, offered in their school.

Students undertaking to proceed to the degree of Bachelor of Arts or Bachelor of Science before entering upon the study of Medicine are advised to elect Chemistry II and Chemistry

German IA, German IIA; Botany IIM; Chemistry I (if Chemistry has been taken at Matriculation) or Chemistry IA (if Chemistry has not been taken at Matriculation), Chemistry IIM; Physics I (if Physics has been taken at Matriculation) or Physics IA (if Physics has not been taken at Matriculation); Physics IIM; Zoology IIM.

If Latin has not been taken at Matriculation but the requirements for entrance upon the course for the B.A. or B.Sc. have been fully met by the election of another language or languages the student may proceed with pre-medical studies, but must supplement the Matriculation record by standing in Matriculation Latin before the academic requirements for entrance upon Medicine are fully met.

6. A student desiring to qualify for entrance upon the course for the degree in Law may, if fully matriculated (with a course involving Latin) do so upon completing forty units in the Junior Division, his course to include Latin I and to comply in all respects with the standard requirements for admission to the Senior Division of the curriculum leading to the B.A. or B.Sc. degree.

7. A student who has not taken both Physics and Chemistry for Matriculation must in the Junior Division complete a Science subject or Science subjects of the weight of four units. An exception will be made in the case of a student who completes twenty-four units of language work in the Junior Division, in which case the requirements of four units of Science work may be met in the Senior Division.

### Senior Pass Division in Arts and Science

A student may be admitted conditionally to the Senior Pass Division in Arts and Science who has completed at least thirty-six units of credit in the Junior Division upon an approved curriculum. In case he is permitted to enter without having completed in full the forty required units of the Junior Division this fact will be taken into account in approving his course for the first academic year of his work in the Senior Division.

The work of the Senior Pass Division in Arts and Science comprises the following courses from which work must be completed representing in the aggregate thirty-two units of credit. This work must be chosen subject to the restrictions set out below and the requirements with regard to prerequisite courses found at the opening of the respective departmental announcements. The Roman numeral after the name of a subject indicates the year of a student's course in which it is normally taken and the Arabic numeral in parentheses thereafter the value of the subject in units of credit towards a degree.

Group I (from which work of the value of sixteen units must be completed):

III, Botany II and Botany III, Zoology II and Zoology III and Physics II in lieu of the more specialized pre-medical courses in these subjects.

It is to be understood that the University does not undertake to accept all students into the course in Medicine who have completed the courses necessary to fulfil academic entrance requirements. Applications for admission on the required form must be submitted by March 15th each year and selection by the Committee on Admissions will be based upon residence (preference being given to Manitoba students), scholastic attainments, and the probability of work of high quality in the Medical course. Admission to the first year in the medical course is tentative—final acceptance of students being dependent upon satisfactory work during the first term and the possession of such personal qualities as would point to the probability of success in the study and practice of Medicine.

Biblical Greek III (4), Biblical Literature III (4)\*, Botany III (4), Chemistry III (4), Economics III (4), English III (4), French III (4) Geology III (4), German III (4), Classical Greek III (4), Hebrew III (4), History III (4), Latin III (4), Mathematics III (4), Mathematics IIIA (2), Philosophy III (4), Physics III (4), Religious Education (Psychology and Methods) (4)\*, Principles of Sociology (4), Zoology III (4).

Group II (from which work of the weight of sixteen units must be com-

pleted):

Biblical Greek IV (4), Biblical Literature IV (4)\*, Botany IV (4), Chemistry IV (4), Economics IV (4) or Economics IVG (8), English IV (4) or English IVG (8), French IV (4) or French IVG (8), Geology IV (4), German IV (4) or German IVG (8), Classical Greek IV (4) or Classical Greek IVG (8), Hebrew IV (4), History IV (4) or History IVG (8), Latin IV (4) or Latin IVG (8), Mathematics IV (4) or Mathematics IVG (8), Applied Mathematics IV (4), Philosophy IV (4) or Philosophy IVG (8), Physics IV (4), Religious Education (Principles and History) (4)\*, Applied Sociology (4), Zoology IV (4).

The following consideration should be kept in view by students in considering their choices of subjects in the Senior Pass Division in Arts and Science:

- 1. Strict regard must be had for the prescription of prerequisites for the various subjects at the opening of the respective departmental announcements.
- 2. The Committee on Students' Courses will expect that in the main the subject elected in Group I above will be carried forward in Group II, or, in other words, that a reasonable degree of sequence will be observed.
- 3. It is permissible, in connection with one or other of Groups I and II to substitute, subject to the approval of the Committee on Students' Courses, for four units of work there set down, four units from the Junior Division, such as, for example, the elementary work as a science or a language not already taken. Eight units of Junior Division work for Senior Division credit may be elected, four in each group, provided they represent two courses in sequence either in German or in Greek.
- 4. A prerequisite to taking an eight-unit course in Group II of the Senior Pass Division is that the student shall have already standing of at least 67% in the course in the same subject normally taken in Group I or the First Year of the Senior Division.
- 5. A student who desires to qualify for the degree of Bachelor of Science in the General Course, must, at the end of the Senior Division, have completed Science courses of the weight of at least thirty two units, (of which at least twenty must be for courses normally taken in the Senior Division), with at least ten units in each of two Sciences. If he does not meet this requirement with respect to the Scince content of his course, but has otherwise regularly completed the work of the Junior Division and the Senior Pass Division he will receive the degree of Bachelor of Arts in the General Course.
- 6. In the selection of students to enter the Normal School course for graduates in Arts and Science, preference will be given by the Department

<sup>\*</sup>Of Religious Education (Psychology and Methods) and Biblical Literature III only one may be taken. Similarly of Religious Education (Principles and History) and Biblical Literature IV only one may be taken.

of Education to students who, throughout the Senior Division, have taken twenty-four out of the required thirty-two units in the following subjects: Botany, Chemistry, English, French, German, History, Latin, Mathematics, Physics, Zoology.

# Senior Honors Division in Arts

A student may be admitted to the Senior Honors Division in Arts who has fully completed the forty required units of credit in the Junior Division in Arts and Science upon an approved curriculum.

A student who, at the close of two years in the Junior Division, has not qualified to enter the Senior Honors Division, may after one year's work in the Senior Pass Division, transfer to the Senior Honors Division provided he has by that time—

- 1. Completed forty units of credit in the Junior Division upon an approved curriculum and sixteen units of credit in the Senior Pass Division.
- 2. Obtained at least 67% on each of two subjects (representing eight units of credit) of Group I of the Senior Pass Division, which subjects he will be permitted to elect in connection with further work in the Senior Honors Division.

The work of the Senior Honors Division in Arts comprises the following courses from which work must be completed representing in the aggregate forty-eight units of credit. This work must be chosen subject to the restrictions set out below and the requirements with regard to prerequisite courses found at the opening of the respective departmental announcements. The Roman numeral after the name of a subject indicates the year of a student's course in which it is normally taken and the Arabic numeral in parentheses thereafter the value of the subject in units of credit towards a degree.

Group I (from which work of the value of sixteen units must be completed)—

Biblical Greek III (4), Biblical Literature III (4)\*, Economics III (4), English III (4), French III (4), German III (4), Classical Greek III (4), Hebrew III (4), History III (4), Latin III (4), Mathematics III (4), Philosophy III (4), Religious Education (Psychology and Methods) (4)\*, Sociology III (4), †Physics III (4).

A student may not continue in the Senior Honors Division who at the end of one annual session has not completed sixteen units of work from Group I and who has not as well obtained at least 67% on each of two subjects representing eight units of credit, which subjects he proposes to elect in connection with his further work in the Senior Honors Division.

Group II (from which work of the value of thirty-two units must be completed, consisting of a sixteen-unit sequence in each of two subjects in which the student has obtained already at least 67% in connection with his work of Group I).

<sup>\*</sup>Of Religious Education (Psychology and Methods) and Biblical Literature III only one may be taken.

<sup>†</sup>Physics III, Physics IVH, and Physics V may be elected only with Mathematics or Applied Mathematics.

Economics IV H (8), Economics V (8);
English IV H (8), English V (8);
French IV H (8), French V (8);
German IV H (8), German V (8);
Classical Freek IV (8), Classical Greek V (8);
Hebrew IV H (8), Hebrew V (8);
History IV H (8), History V (8);
Latin IV H (8), Latin V (8);
Mathematics IV H (8), Mathematics V (8);
Applied Mathematics IV H (4), Applied Mathematics V (4);
Philosophy IV H (8); Philosophy V (8).

Upon completion of the above course the student will receive the degree of Bachelor of Arts with Honors.

At the close of the Second Year of the Senior Honors Division a student may be denied the right to go forward with the Honors work of the Third Year, where, in the opinion of both committees of examiners concerned with the rating of his work, his achievement does not warrant it, and the University Council may, on the joint recommendation of the two committees, admit him to the Bachelor of Arts degree in the General Course provided he has not fallen below 50 per cent. on any paper.

# MASTER OF ARTS

The following are the requirements for the degree of Master of Arts (M.A.):

- 1. To be accepted as a candidate for the degree of Master of Arts an applicant must hold the degree of Bachelor of Arts of the University of Manitoba\* or possess such qualifications as the Committee on Post-Graduate studies of the General Faculty Council may deem to be the equivalent of this degree. If his degree be the pass Bachelor of Arts degree of the University of Manitoba he must have obtained a standing of at least 67 per cent. in either the Third or the Fourth Year of his undergraduate course in the subject or subjects in which he proposes to elect work for the Master of Arts degree.††
- 2. (a) The candidate for the Master of Arts degree who, on admission, possesses the Honors B.A. degree of the University of Manitoba, or an equivalent degree, must, to earn the Master's degree, complete at least one academic year of graduate work, where he devotes his whole time to study of

<sup>†</sup>Physics III, Physics IVH, and Physics V may be elected only with Mathematics or Applied Mathematics.

<sup>\*</sup>The holder of the University of Manitoba B.A. degree of 1926 or earlier, will not be admitted to candidature for the Master of Arts degree without complying with the requirements of additional preliminary work in Honors courses (as laid down in 2 (b) (1) above), except in those cases in which the work done at the time the Bachelor's degree was taken, in the subjects elected for the Master's degree, was fully equivalent to that at present required for the Honors degree.

<sup>††</sup>An applicant possessing the pass Bachelor of Arts degree, who has not met the standard of at least 67 percent in either the Third or the Fourth Year of his undergraduate course in the subject or subjects in which he proposes to elect work for the Master of Arts degree, may, on the recommendation of the department or departments concerned, and with the concurrence of the Committee on Post-Graduate Studies, be permitted on a provisional basis, to take the required sixteen units of Honors B.A. work but may not proceed further with his M.A. course unless he attains a standard of at least 67 percent on this work.

the prescribed courses. Where he does not devote his whole time to such study, the minimum period shall be two academic years, except in the case of students who attend a summer session in graduate work at some institution acceptable to the departments concerned, when the minimum time may be reduced to one year on recommendation of those departments. Students required to take two or more years for the degree must receive standing on at least one-third of their work before entering upon their final year.

- (b) The candidate for the Master of Arts degree, who, on admission, possesses the pass B.A. degree of the University of Manitoba, or an equivalent degree, must, to earn the Master's degree, satisfy the following requirements:
  - (1) He shall first obtain sixteen units of credit in Honors courses as prescribed for those proceeding to the Honors B.A. degree.\* Of these, eight units shall be for courses listed as Fifth Year Honors courses by the Department in which the candidate shall later elect to take his major subject and submit his thesis, and of the remaining eight, not more than four may be for courses under this Department. These sixteen units of credit, when completed, do not entitle the candidate to the Honors B.A. degree.
  - (2) He shall then proceed to meet the requirements for the M.A. degree as laid down for the holders of the Honors B.A. degree in 2(a) above.
- 3. Two subjects, not necessarily in different departments, shall be taken by every candidate for the M.A. degree. One of those shall be designated as the major subject and special attention shall be devoted to it. It shall be a subject in which the student has already completed the work of the undergraduate Senior Honors Division or in which, if he holds a pass B.A. degree, he has already taken eight additional units of work as required under 2(b) above. The minor subject shall be selected from a group related to the major subject. Not more than one-third of the student's time should be devoted to the minor subject. A total of 800 marks is assigned to the entire work for the M.A. degree, distributed as follows: 200 marks for the minor subject and 600 marks for the major subject and the thesis.
- 4. Every candidate for the Master of Arts degree must submit a thesis on some topic connected with his major subject that shall be judged satisfactory by the candidate's examining committee.
- 5. The student shall pursue his work under the direction of two or more instructors of whom at least one shall be a member of the University Faculty. Recommendations with regard to Major and Minor courses and subject of thesis shall be drawn up by the departments immediately concerned after consultation with the candidate and such recommendations shall be submitted for final approval to the standing committee of the General Faculty Council on Post-Graduate Studies not later than December 1st in any year. When these have been approved he will be notified of the fact by the Secretary of the Committee on Post-Graduate Studies and must then become registered at once as a candidate for the degree and pay the required fees. Students who desire to undertake the work extra-murally will not be permitted to

<sup>\*</sup>The holder of the University of Manitoba B.A. degree of 1926 or earlier, will not be admitted to candidature for the Master of Arts degree without complying with the requirements of additional preliminary work in Honors courses (as laid down in 2 (b) (1) above), except in those cases in which the work done at the time the Bachelor's degree was taken, in the subjects elected for the Master's degree, was fully equivalent to that at present required for the Honors degree.

register unless the library facilities to which they have access are satisfactory to the department or departments concerned.

- 6. The candidate for the Master of Arts degree shall pass such written examinations on the two subjects of his course at such times and under such conditions as the Committee on Post-Graduate Studies shall decide, and shall also undergo a final oral examination conducted by the examining committee. The committee which shall pass upon the merits of the thesis shall consist of the instructors under whose direction the candidate's work has been performed, and at least one other nominated by the Committee on Post-Graduate Studies. The pass mark at written examinations for the M.A. degree is 60%; the thesis, to be satisfactory, must receive a grade of at least 67%.
- 7. The thesis in its completed form shall be submitted not later than April 15th in any year to ensure the conferring of the degree at the Annual Convocation of that year. At least four printed or typewritten copies are required, one of which shall be deposited in the Library. It is desirable that uniformity in style, format, etc., be observed and in reference to these matters the candidate should consult the secretary of the Committee on Post-Graduate Studies.
- 8. For the present the course of study in any department for the M.A. degree will in the main be outlined on request by the instructors in that department, and adapted to suit the needs, capabilities and previous training of the applicant. A limited number of M.A. courses are prepared in advance, and these are listed along with the undergraduate courses of the same department elsewhere in this Calendar.
- 9. By Special arrangement the course for the degree of Bachelor of Science in Agriculture, with specialization in Economics (the course involving the Agricultural Business option) is accepted as being equivalent, as a foundation for graduate study in Economics, to a pass B.A. degree. The holder of the B.S.A. degree (Agricultural Business option) having taken a course in which there is a mimimum of economic theory as such and a great deal of applied economics, is required, therefore, in his preliminary Honors work and his Master's work, to bring up his arrears in economic theory and to put himself in this respect on an equal footing with the student who has taken the Honors B.A. work. Such a student takes a Major in Economic Theory with a minor in either International Trade, Public Finance, Economic History, Political Science, or some other allied subject. His thesis is based upon investigational work in the field of Applied Economics, done under direction upon local materials. Approximately half of the course work is taken in regular classes (B.A. Pass and Honors) and the other half will be assigned reading. The total amount of the course work will be determined in part by the student's previous training and in part by the nature and scope of his special investigation. The minimum time in which the work can be carried out is two summers (given to investigation and reading) and one regular annual session (given primarily to course work and lectures). For further details, consult the Calendar of the Faculty of Agriculture and Home Economics.

Since students are admitted to the course leading to the B.S.A. degree with any complete Grade XI standing (including that of the Entrance-to-Normal Course of the Manitoba Department of Education, which does not necessarily require knowledge of a foreign language), candidates for the

M.A. degree, holding the Bachelor's degree in Agriculture, are required to establish a reading knowledge of either French or German before proceeding to their final examination.

# MASTER OF ARTS IN EDUCATION

The Council of the University has recently established the degree of Master of Arts in Education, accepting the offer made by the Committee of the Manitoba Summer School to provide instruction in certain courses in the Philosophy and History of Education and in Educational Administration and to supervise Educational Research.

The following are the requirements for the degree of Master of Arts in Education:

- 1. To be accepted as a candidate for the degree of Master of Arts in Education an applicant must have the following qualifications: (a) He must hold the degree of Bachelor of Arts of the University of Manitoba or possess such qualifications as the Committee on Post-Graduate Studies of the General Faculty Council may deem to be equivalent to this degree. (b) He must hold a First Class Professional Teacher's Certificate of the Province of Manitoba or its equivalent as determined by the Department of Education, and must have had a minimum of one year's attendance at an approved normal school\*. (c) He must have had at least two years' teaching experience.
- 2. Application for admission to candidacy for the degree shall be made to the Secretary of the Committee on Post-Graduate Studies of the University of Manitoba and shall be accompanied by a recommendation from its Sub-Committee on Education, covering major and minor courses, and where possible, a thesis subject prepared along the lines set out in 3 below.
- 3. Candidates for the degree of Master of Arts in Education shall be required to complete eight graduate courses in Education. Courses 1, 2, 3, 4 and 5 (Group I) shall be compulsory for all candidates and shall be designated as the major. Three additional courses, two from Group II and one from Group III shall be selected by the candidate, subject to the approval of the Committee and shall be designated as the minor.

# COURSES LEADING TO THE DEGREE OF MASTER OF ARTS IN EDUCATION

# Group I

#### Course

- 1. School Surveys and Methods of Educational Research.
- 2. Statistical Methods Applied to Education.
- 3. General History of Education.
- 4. Psychology of Elementary and Secondary Education.
- 5. Mental and Achievement Tests.

<sup>\*</sup>A deficiency in this respect may be overcome by taking an additional course or courses of graduate work for the degree, as recommended by the Sub-Committee on Education and approved by the Committee on Post-Graduate Studies.

# Group II

- 6. Problems of Educational Administration and Supervision.
- 7. Problems of Classroom Organization and Management.
- 8. The Organization and Administration of the Junior High School, the Senior High School and the Junior College.
- 9. Curriculum Construction.

# Group III

- 10. Special Methods of Instruction in English.
- 11. Special Methods of Instruction in Foreign Languages.
- 12. Special Methods of Instruction in History and Civics.
- 13. Special Methods of Instruction in Mathematics.
- Special Methods of Instruction in the Biological or in the Physical Sciences.
- 15. Problems in Reading and in the Use of the School Library.
- 16. Health and Physical Education.
- (N.B.—As a prerequisite to enrolment in the courses in Special Methods in Group III, the Sub-Committee on Education will demand some special academic qualifications in the subject or subjects involved, looking eventually to the prescription of the Honors B.A. or B.Sc. degree or its equivalent.)
- 4. Candidates must submit a thesis on some topic which has been approved by the instructor in charge of the course from which the subject is chosen and which has been approved by the Sub-Committee on Education. The thesis must be based on an investigation which involves the use of the objective method. It shall be graded for degree credit by the instructor under whose direction it has been prepared and by two other persons appointed by the Committee on Post-Graduate Studies.
- 5. To complete the course of study for the degree will require at least two years. Work will be conducted both extra-murally and intra-murally under the direction of the Manitoba Summer School. Students may not register in more than four courses during any one year.
- 6. Candidates for the degree of Master of Arts in Education shall by a final examination, either oral or written, show proficiency in the whole field of their course. This examination shall be held at such times and under such conditions as the Committee on Post-Graduate Studies shall determine. The pass mark for all written examinations and for the thesis shall be the same as for the M.A. in other departments.

# LECTURES OFFERED IN EDUCATION AT THE MANITOBA SUMMER SCHOOL

#### Session of 1933

Lectures on selected subjects in the course of study leading to the degree of Master of Arts in Education were offered at the University, Fort Garry, during the session of the Manitoba Summer School, commencing Wednesday, July twelfth, and ending Wednesday, August twenty-third, 1933.

# **CURRICULA IN SCIENCE**

The University of Manitoba confers two degrees in Science, viz., Bachelor of Science (B.Sc.) and Master of Science (M.Sc.).

# I—BACHELOR OF SCIENCE

# Matriculation

The requirements for Matriculation for Science are set forth in detail in the Programme of Studies for Secondary Schools of the Department of Education. No applicant may be received as a regular student of the Junior Division in Arts and Science who carries any condition from Matriculation (the work Grades IX, X and XI in the High Schools as prescribed for University entrance). Students who have fully completed courses recognized by the Department of Education for purposes other than University entrance, such as the Normal School Entrance course or the Practical Arts course, and whose deficiencies on the Matriculation course do not exceed two conditions, may be accepted as students of the Junior Division subject to such limitation of their first session's program in the Junior Division as may be ordered by the Committee on Student's Courses and with the requirement of approved concurrent instruction in the Matriculation work as yet uncompleted.

# Undergraduate Course

A student who has fulfilled the requirements for Arts Matriculation may proceed to the Pass or General Bachelor of Science degree by completing satisfactorily, subject to the rules and regulations set forth hereafter, forty units\* of credit in the Junior Division in Arts and Science and thirty-two units of credit in the Senior Pass Division in Arts and Science. He may proceed to the Honors Bachelor of Science degree by completing satisfactorily, subject to the rules and regulations set forth hereafter, forty-two units of credit in the Junior Division in Arts and Science and forty-eight units of credit in the Senior Honors Division of Arts and Science. The work for the Pass or General degree is normally done in four annual sessions and that for the Honors degree in five, two being given to the Junior Division and two or three, as the case may be, to the Senior Division.

# Junior Division in Arts and Science

The work of the Junior Division in Arts and Science comprises the following courses from which work must be completed by the student proceeding to the Bachelor of Science degree, representing, in the aggregate, forty units of credit for the Pass degree, and forty-two units for the Honors degree. This work must be chosen subject to the restrictions set out below and the requirements with regard to prerequisite courses found at the opening of the respective departmental announcements. The Roman numeral after the name of a subject indicates the year of a student's course in which it is normally taken and the Arabic numeral in parentheses thereafter, the value of the subject in units of credit towards a degree.

<sup>\*</sup>A unit is a body of work to which is assigned for instructional purposes one hour of lecture or other class room exercise per week or one continuous laboratory period of two or three hours per week, throughout an entire session, or the equivalent.

# FOR STUDENTS PROCEEDING TO THE BACHELOR OF SCIENCE DEGREE IN THE GENERAL COURSE

Required Subjects (totalling twenty units)-

1. English I (4), English II (4).

2. Mathematics I (4).

3. French I (4), French II (4); or

German I (4), German II (4); or

Latin I (4), Latin II (4); or

Classical Greek II (4), Classical Greek IIA (4); or

Biblical Greek I (4); Biblical Greek II (4).

(The language elected under 3 must be a language already taken for Matriculation credit. In the case of Biblical Greek I and II, Classical Greek must have been taken for Matriculation. Subject to the approval of the Board of Studies, Biblical Greek I may be substituted for French II or German II or Latin II or Classical Greek IIA, the prerequisite for Biblical Greek I being either Biblical Greek IA or Classical Greek I.)

Elective Subjects (from which work of the value of twenty units must

be completed).

(The language taken in 3 above is, of course, excluded from election here.)
Biblical Greek IA (4), Biblical Greek I (4), Biblical Greek
II(4)\*.

French I (4), French II (4);

German I (4), German IA (4), German II (4), German IIA II (4)\*;

Classical Greek I (4), Classical Greek II (4), Classical Greek IIA (4);

Hebrew I (4), Hebrew II (4);

Icelandic I (4), Icelandic II (4);

Latin I (4), Latin II (4);

History I (4).

History II (4).

Astronomy II (2).

Botany II (2); Botany IIM (2);

Chemistry I (4), Chemistry II (4), Chemistry IIM (4)\*;

Mechanical Drawing I (2), Architectural Drawing I (2);†

Geology II (2);

Mathematics IA or IIA (2), Mathematics II (4);

Physics I (4), Physics IIM (2); Physics II (4);\*

Zoology II (2), Zoology IIM (4);

Economics II (2);

Ethics II (2) \*\*;

Logic II (2)\*\*;

Psychology II (2).

Music\*\*\*.

<sup>\*</sup>Only **eight** units may be taken in German or Chemistry or Physics or Biblical Greek or Classical Greek. Physics IIM may be elected only in the Pre-Medical Junior Division. See paragraph 5, pages 27-28.

<sup>†</sup>A student who elects Mechanical Drawing I or Architectural Drawing I must also take Mathematics IA. Only one of these two courses in Drawing may be taken.

<sup>\*\*</sup>A student may elect one of Ethics II and Logic II but not both.

<sup>\*\*\*</sup>The prerequisite for Music is standing obtained in the Music Option in Grade XI, or a satisfactory equivalent. Students electing Music in the Junior Division are required to take the work of the fifth or a higher year of the Music Option Syllabus of the Music Option Board concurrently with the other subjects of their programme of the session. Theoretical and practical tests will be given in connection with the April examinations.

# FOR STUDENTS PROCEEDING TO THE BACHELOR OF SCIENCE DEGREE IN THE HONORS COURSE

Required Subjects (totalling twenty-six units of credit)-

1. English I (4), English II (4).

2. Mathematics I (4), Mathematics IA or IIA (2).

3. Physics I (4), Chemistry I (4) and either Physics II (4) or Chemistry II (4).

Elective Subjects (totalling sixteen units of credit and chosen on the following plan)—

 Language courses totalling eight units— French I (4) and German IA (4).

Work of the value of eight units from the following—
 Mathematics II (4), Physics II (4) or Chemistry II (4) (the one not already taken), Botany II (2), Zoology II (2), Geology II (2), Astronomy II (2).

The following considerations should be kept in view by students in considering their choices of subjects in the Junior Division:

- 1. Strict regard must be had for the prescription of prerequisites for the various subjects at the opening of the respective departmental announcements.
- 2. The Committee on Students' Courses will expect that, unless in exceptional cases, a subject will not be elected in any year other than the one in which, according to its designation, it is "normally taken."
- 3. A departure from this rule is found in the practice of recognizing a student's right in one year only of the Senior Pass Division or in the first year of the Senior Honors Division to elect as *one* of his four subjects a four unit subject of the Junior Division, provided of course that he secures the approval of the Committee on Students' Courses.
- 4. (a) A student desiring to qualify for entrance upon the course for the degree in Civil Engineering or in Electrical Engineering, may, if fully matriculated, do so, upon completing twenty units in the Junior Division in Arts and Science upon the following course: English I, Mathematics I, Mathematics IA, Drawing I, Chemistry I and one of French I, German I, Latin I, Greek II. The language elected must have been taken for Matriculation.
- (b) A student desiring to qualify for entrance upon the course for the degree in Architecture, may, if fully matriculated, do so upon completing twenty units in the Junior Division in Arts and Science upon the following course: English I, Mathematics I, Mathematics IA, Architectural Drawing I, Physics I and French I.
- 5. A student desiring to qualify for entrance upon the course for the degree of Medicine may, if fully matriculated, satisfy the further academic requirements by completing forty units in the Junior Division in Arts and Science upon the following course\*: English I, English II; Mathematics I; German IA, German IIA; Botany IIM; Chemistry I (if Chemistry has been

<sup>\*</sup>In general any standard course, beyond matriculation, given in a recognized University and accepted by it for two years' credit toward a B.A. or a B.Sc. degree, is considered adequate for purposes of admission to the course in Medicine, provided the minimum requirements laid down above in Physics, Chemistry, Botany and Zoology are fully met. (Students

taken at Matriculation) or Chemistry IA (if Chemistry has not been taken at Matriculation), Chemistry IIM; Physics I (if Physics has been taken at Matriculation) or Physics IA (if Physics has not been taken at Matriculation) Physics IIM; Zoology IIM.

If Latin has not been taken at Matriculation but the requirements for entrance upon the course for the B.A. or B.Sc. have been fully met by the election of another language or languages the student may proceed with premedical studies, but must supplement the Matriculation record by standing in Matriculation Latin before the academic requirements for entrance upon Medicine are fully met.

6. A student who desires to qualify for the degree of B.Sc. in the General Course must, at the end of the Senior Division, have completed Science courses of the weight of at least thirty-two units (of which at least twenty must be for courses normally taken in the Senior Division) and at least two Science subjects must be continued to the end of the Senior Division. It is required that he elect either Physics I or Chemistry I in the Junior Division and should make additional Science elections in view of the requirements above.

In order that students intending to enter the Senior Honors Division in Science may be informed of the more usual and desirable combinations of subjects for their work of the Second and Third Years of the Senior Division, and further, in order that such students may have some guidance in the selection of their subjects in the Junior Division and the First Year of the Senior Honors Division, so that they may acquire adequate preliminary training for the more specialized work of the last two years, the following suggestions are made:

It is recommended that one of the following combinations be elected in the Second and Third Years of the Senior Honors Division, viz.: Botany and Zoology; Chemistry and Physics; Chemistry and Botany; Chemistry and Zoology; Chemistry and Geology; Mathematics and Physics; Geology and Zoology. Any student who for special reasons desires to prepare himself for the election of any combination of subjects not listed here should consult the Departments concerned at the earliest opportunity.

#### First Year, Junior Division

Students intending to proceed to the Senior Honors Division in Science should elect the following subjects: English I (4); Mathematics I (4); Physics I (4); Chemistry I (4); French I (4) or German I (4) or German IA (4).

taking Grade XII with the study of Medicine in view, should elect the language, preferably a modern one, offered in their school.)

Students undertaking to proceed to the degree of Bachelor of Arts or Bachelor of Science before entering upon the study of Medicine are advised to elect Chemistry II and Chemistry III, Botany II and Botany III, Zoology II and Zoology III and Physics II in lieu of the more specialized pre-medical courses in these subjects.

It is to be understood that the University does not undertake to accept all students into the course in Medicine who have completed the courses necessary to fulfil academic entrance requirements. Applications for admission on the required form must be submitted by March 15th each year and selection by the Committee on Admissions will be based upon residence (preference being given to Manitoba students), scholastic attainments, and the probability of work of high quality in the Medical course. Admission to the first year in the medical course is tentative—final acceptance of students being dependent upon satisfactory work during the first term and the possession of such personal qualities as would point to the probability of success in the study and practice of Medicine.

# Second Year, Junior Division

Students intending to proceed to the Senior Honors Division in Science should elect the following subjects: English II (4); French II (4), or German IA\* (4), or German II (4), or German IIA (4); Mathematics IIA (2); Physics II (4), or Chemistry II (4). In addition the course must be rounded out to twenty-two units and the following selections for the various Science combinations of the Second and Third Years of the Senior Honors Division should be made:

BOTANY AND ZOOLOGY
BOTANY AND CHEMISTRY
CHEMISTRY AND ZOOLOGY
CHEMISTRY AND PHYSICS
MATHEMATICS AND PHYSICS
MATHEMATICS AND GEOLOGY
CHEMISTRY AND GEOLOGY
Mathematics II (4); Chemistry II (4);
Physics II (4).
CHEMISTRY AND GEOLOGY
—Chemistry II (4); Geology II (2); Physics II (4); Zoology II (2), or Botany II (2).
GEOLOGY AND ZOOLOGY
—Geology II (2); Botany II (2); Zoology II (2);
Astronomy II (2); Chemistry II (4).

# First Year, Senior Division

The following selections of subjects for the various Science combinations of the Second and Third Years of the Senior Honors Division should be made:

BOTANY AND ZOOLOGY

—Botany III (4); Zoology III (4); 8 units from Chemistry III (4); Physics III (4); Geology II (2), an Arts subject (2).

CHEMISTRY AND PHYSICS —Chemistry III (4); Physics III (4); Mathematics IIIS (4) or Mathematics III (4); 4 additional units to be selected.

CHEMISTRY AND BOTANY
CHEMISTRY AND ZOOLOGY
Chemistry III (4); Botany III (4);
Zoology III (4); 4 additional units to be selected.

CHEMISTRY AND GEOLOGY —Chemistry III (4); Geology III (4); Physics III (4); Botany III (4) or Zoology III (4).

MATHEMATICS AND PHYSICS—Mathematics III (4); Physics III (4); and 8 additional units to be selected.

GEOLOGY AND ZOOLOGY —Geology III (4); Botany III (4); Zoology III (4); Chemistry III (4).

#### Senior Pass Division in Arts and Science

A student may be admitted conditionally to the Senior Pass Division in Arts and Science who has completed at least thirty-six units of credit in the Junior Division upon an approved curriculum. In case he is permitted to enter without having completed in full the forty required units of the Junior Division this fact will be taken into account in approving his course for the first academic year of his work in the Senior Division.

The work of the Senior Pass Division in Arts and Science comprises the following courses from which work must be completed representing in the

<sup>\*</sup>It is expected that by the end of the Junior Division students intending to take Honors in Science will have earned eight units of credit in modern languages and will have an elementary acquaintance with both French and German.

aggregate thirty-two units of credit. This work must be chosen subject to the restrictions set out below and the requirements with regard to prerequisite courses found at the opening of the respective departmental announcements. The Roman numeral after the name of a subject indicates the year of a student's course in which it is normally taken and the Arabic numeral in parentheses thereafter the value of the subject in units of credit towards a degree.

Group I (from which work of the value of sixteen units must be cometed)—

Biblical Greek III (4), Biblical Literature III (4)\*, Botany III (4), Chemistry III (4), Economics III (4), English III (4), French III (4), Geology III (4), German III (4), Classical Greek III (4), Hebrew III (4), History III (4), Latin III (4), Mathematics III (4), Mathematics IIIA (2), Philosophy III (4), Physics III (4), Religious Education (Psychology and Methods) (4)\*, Principles of Sociology (4), Zoology III (4).

Group II (from which work of the value of sixteen units must be completed)—

Biblical Greek IV (4), Biblical Literature IV (4)\*, Botany IV (4), Chemistry IV (4), Economics IV (4), English IV (4), French IV (4), Geology IV (4), German IV (4), Classical Greek IV (4), Hebrew IV (4), History IV (4), Latin IV (4), Mathematics IV (4), Philosophy IV (4), Physics IV (4), Religious Education (Principles and History) (4)\*, Applied Sociology (4), Zoology IV (4).

The following considerations should be kept in view by students in considering their choices of subjects in the Senior Pass Division in Arts and Science:

- Strict regard must be had for the prescription of prerequisites for the various subjects at the opening of the respective departmental announcements.
- 2. The Committee on Students' Courses will expect that in the main the subjects elected in Group 1 above will be carried forward in Group II, or, in other words, that a reasonable degree of sequence will be observed.
- 3. It is permissible, in connection with one or other of Groups I and II, to substitute, subject to the approval of the Committee on Students' Courses, for four units of work there set down, four units from the Junior Division, such as, for example, the elementary work in a Science or a Language not already taken. Eight units of Junior Division work for Senior Division credit may be elected, four in each group, provided they represent two courses in sequence, either in German or in Greek.
- 4. A student who desires to qualify for the degree of Bachelor of Science in the General Course must, at the end of the Senior Division, have completed Science courses of the weight of at least thirty-two units, (of which at least twenty must be for courses normally taken in the Senior Division), and at least two Science subjects must be continued to the conclusion of the Second Year of the Senior Division. If he does not meet this requirement with respect to the Science content of his course, but has otherwise regularly completed the work of the Junior Division and the Senior Pass Division, he will receive the degree of Bachelor of Arts in the General Course.

<sup>\*</sup>Of Religious Education (Psychology and Methods) and Biblical Literature III only **one** may be taken. Similarly of Religious Education (Principles and History) and Biblical Literature IV only **one** may be taken.

#### Senior Honors Division in Science

A student may be admitted to the Senior Honors Division in Science who has fully completed the forty-two required units of credit in the Junior Division in Arts and Science upon a curriculum approved for the purpose.

Group I (from which work of the weight of sixteen units must be completed)—

Astronomy III (4)\*, Botany III (4), Chemistry III (4), Geology III (4), Mathematics III (4), Physics III (4), Zoology III (4).

A student may not continue in the Senior Honors Division who at the end of one annual session has not completed sixteen units of work from Group I and who has not as well obtained at least 67% on each of two subjects representing eight units of credit, which subjects he proposes to elect in connection with his further work in the Senior Honors Division.

Group II (from which work of the weight of thirty-two units must be completed)—

Botany IV H (8), Botany V (8); Chemistry IV H (8), Chemistry V (8); Geology IV H (8), Geology V (8);

Mathematics IV H (8), Mathematics V (8);

Physics IV H (8), Physics V (8); Zoology IV H (8), Zoology V (8).

Upon completion of the above course the student will receive the degree of Bachelor of Science with Honors.

At the close of the Second Year of the Senior Honors Division a student may be denied the right to go forward with the Honors work of the Third Year, where, in the opinion of both committees of examiners concerned with the rating of his work, his achievement does not warrant it, and the University Council may, on the joint recommendation of the two committees, admit him to the Bachelor of Science degree in the General Course provided he has not fallen below 50 per cent. on any paper.

# II—MASTER OF SCIENCE

The following are the requirements for the degree of Master of Science (M.Sc.):

1. To be accepted as a candidate for the degree of Master of Science an applicant must hold the degree of Bachelor of Science of the University of Manitoba\*\* or possess such qualifications as the Committee on Post-Graduate Studies of the General Faculty Council, after reference to the Science Committee of the Faculty of Arts and Science, may deem to be the equivalent of this degree. If his degree be the pass Bachelor of Science degree of the University of Manitoba he must have obtained a standing of at least 67 per cent.

<sup>\*</sup>If Astronomy III is elected, Mathematics III and Physics III must also be taken.

<sup>\*\*</sup>A holder of the University of Manitoba B.Sc. degree of 1926 or earlier, will not be admitted to candidature for the Master of Science degree without complying with the requirement of additional preliminary work in Honors courses (as laid down in 2 (b) above), except in those cases in which the work done at the time the Bachelor's degree was taken, was fully equivalent, in the subjects elected for the Master's degree, to that at present required for the Honors degree.

in either the Third or the Fourth Year of his undergraduate course in the subject or subjects in which he proposes to elect work for the Master of Science degree.†

- 2. (a) The candidate for the Master of Science degree who, on admission, possesses the Honors B.Sc. degree of the University of Manitoba or an equivalent degree must, to earn the Master's degree, complete at least one year of graduate work in one or more of the following departments of the University of Manitoba: Mathematics, Physics, Chemistry, Geology, Botany, Zoology, Physiology, Biochemistry. He shall complete and pass an examination on two courses of study, one closely related to the subject of his thesis and the other on an allied subject. His work shall be done under the direction of at least two members of the University Faculty of Arts and Science. The thesis and main course of study shall be taken in a department in which the student has completed the work of the Senior Division in his undergraduate course; the other may be taken in the same or an allied department.
- (b) The candidate for the Master of Science degree who, on admission, possesses the Pass B.Sc. degree of the University of Manitoba or an equivalent degree must, to earn the Master's degree, complete at least two years of work in two of the following departments of the University of Manitoba: Mathematics, Physics, Chemistry, Geology, Botany, Zoology, Physiology, Biochemistry.

He shall first obtain in ordinary course by attendance and examination sixteen units of credit in Honors Courses as prescribed for those proceeding to the Honors B.Sc. degree.\*\* Of these, eight units shall be for courses listed as Fifth Year Honor courses by the Department in which the candidate shall later elect to submit his thesis and of the remaining eight not more than four may be for courses under this Department. These sixteen units of credit, when completed, do not entitle the candidate to the Honors B.Sc. degree.

He shall then complete and pass an examination on two courses of study, one closely related to the subject of his thesis and the other on an allied subject. His work shall be done under the direction of at least two members of the University Faculty of Arts and Science. The thesis and main course of study shall be taken in a department in which the student has completed the work of the Senior Division in his undergraduate course and has studied during the First Year of his post-graduate course; the other may be taken in the same or an allied department. A total of 800 marks is assigned to the entire work for the M.Sc. degree, distributed as follows: 200 marks for the minor subject and 600 marks for the major subject and the thesis.

3. Every candidate for the Master of Science degree shall submit a thesis based on original work done under the direction of the department in which

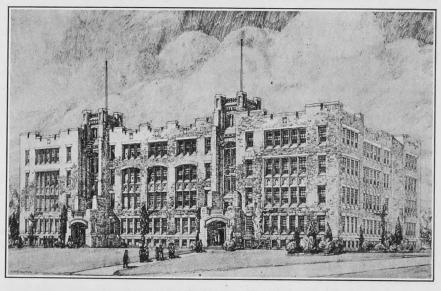
<sup>†</sup>An applicant possessing the pass Bachelor of Science degree, who has not met the standard of at least 67 percent in either the Third or the Fourth Year of his undergraduate course in the subject or subjects in which he proposes to elect work for the Master of Science degree, may, on the recommendation of the department or departments concerned and with the concurrence of the Committee on Post-Graduate Studies, be permitted to take the required sixteen units of Honors B.Sc. work on a provisional basis, but may not proceed further with his M.Sc. course unless he attains a standard of at least 67 percent on this work.

<sup>\*\*</sup>A holder of the University of Manitoba B.Sc. degree of 1926 or earlier, will not be admitted to candidature for the Master of Science degree without complying with the requirement of additional preliminary work in Honors courses (as laid down in 2 (b) above), except in those cases in which the work done at the time the Bachelor's degree was taken, was fully equivalent, in the subjects elected for the Master's degree, to that at present required for the Honors degree.

he has elected to do his research and this thesis must be found satisfactory by the candidate's examining committee.

- 4. A Bachelor of Science of the University of Manitoba may be permitted to meet the requirements for the Master of Science degree by courses of study taken in another University if such work be approved by the Committee on Post-Graduate Studies after reference to the Science Committee of the University Faculty of Arts and Science.
- 5. (a) Every applicant for admission as a candidate for the Master of Science degree should first consult with the heads of the departments of instruction in which he proposes to work and should arrange to submit, through them, to the Committee on Post-Graduate Studies, for approval, not later than October 15th in any academic year, an outline of the courses he plans to undertake. When those have been approved he will be notified of the fact by the Secretary of the Committee on Post-Graduate Studies and must then become registered at once as a candidate for the degree and pay the required fees.
- (b) The nature of the thesis shall subsequently receive the approval of the Committee on Post-Graduate Studies after reference to the Science Committee of the University Faculty of Arts and Science.
- 6. For the examination of the thesis of each candidate the examining committee shall consist of the instructors under whose direction the work has been performed and one other nominated by the Committee on Post-Graduate Studies. The pass-mark at written examinations for the M.Sc. degree is 60%; the thesis, to be satisfactory, must receive a grade of at least 67%.
- 7. The thesis in its completed form shall be submitted not later than the 15th of April in any year to ensure the conferring of the degree at the Annual Convocation of that year. At least four printed or typewritten copies of the thesis shall be submitted by the candidate. One of these will subsequently be deposited in the University Library. It is desirable that uniformity in style, format, etc., be observed, and in reference to these matters the candidate should consult the Secretary of the Committee on Post-Graduate Studies.
- 8. By special arrangement, the course for the degree of Bachelor of Science in Agriculture is accepted as being equivalent, as a foundation for graduate study in Science, to a pass B.Sc. degree. The holder of the B.S.A. degree, having taken a course, in which of necessity, the technical applications of the various Sciences have been emphasized and a mimimum of time spent on pure Science, should, in his first year of additional study, in which he raises his standing to one that is equivalent to that of the Honors B.Sc., take most of his work in the field of pure Science. He is required, therefore, to take sixteen units of work in Senior Division courses Pass or Honors (not less than eight and not more than twelve in the field in which his major subject will fall and four at least in some other department). His course work would in the main be taken under the Faculty of Arts and Science and his investigational work under the Faculty of Agriculture and Home Economics. The following Science Departments of that Faculty are now prepared to undertake graduate work: Agronomy; Chemistry; Plant Pathology (with the co-operation of the Dominion Rust Laboratory); Bacteriology and Animal Pathology. For further details consult the Calendar of the Faculty of Agriculture and Home Economics.

Since students are admitted to the course leading to the B.S.A. degree with any complete Grade XI standing (including that of the Entrance to Normal Course of the Manitoba Department of Education, which does not necessarily require knowledge of a foreign language), candidates for the M.Sc. degree holding the Bachelor's degree in Agriculture, are required to establish a reading knowledge of either French or German before proceeding to their final examination.



NEW SCIENCE BUILDING ON THE FORT GARRY SITE (Senior Division Classes in Science are offered here.)

# COURSES IN ARTS AND SCIENCE IN DETAIL

### DEPARTMENT OF BOTANY

A. H. Reginald Buller, B.Sc., Ph.D., D.Sc., LL.D., F.R.S.C., F.R.S. Professor
H. F. Roberts, B.A., M.Sc., F.A.A.S. Assistant Professor
C. W. Lowe, M.Sc. Assistant Professor

BOTANY II M-Courses 1, 2; 3, 4.

BOTANY II—Courses 1, 2; 3a, 4a.

BOTANY III—Courses 5, 6, 7, 8. (Prerequisite, Botany II or equivalent.)

BOTANY IV—Courses 9, 10, 11, 12 or 13, 14, 15, 16. (Prerequisite, Botany III or equivalent.)

BOTANY IV H—Courses 9, 10, 11, 12; and 17, 18, 19, 20, or Courses 13, 14, 15, 16; and 21, 22, 23, 24. (Prerequisite, Botany III or equivalent.)

BOTANY V—Courses 9, 10, 11, 12; and 17, 18, 19, 20; or Courses 13, 14, 15, 16; and 21, 22, 23, 24. (Prerequisite, Botany IV H or equivalent.)

First Year Pharmacy (Diploma Course)—Courses 1, 2; 3, 4. Second Year Pharmacy (Degree Course)—Courses 1, 2; 3, 4. Third Year Pharmacy (Degree Course)—Courses 9, 10; 11, 12.

Students intending to enter courses in Botany in the Senior Honors Division in Science are advised to consult pages 39-40 for guidance as to choice of subjects in the Junior Division and in the First Year of the Senior Division.

N.B.—For key to system of numbering courses, see page 4.

1, 2, GENERAL BOTANY. An introductory lecture course covering, among other topics, the following: Classification of objects; comparison of living and non-living matter; the difference between animals and plants. structure of the seed and content of its cells; the seeds of the pea, bean, castor oil plant, and date palm; the grains of wheat and corn; the conditions for germination, and the phenomena accompanying it; the exhaustion of the reserve food-stuffs. The seedling: its structure, mode of development and relations with external conditions; the theory of irritability; geotropism, heliotropism and hydrotropism; the further development of shoot and root. The general morphology of the plant body, and the principal modifications of the stem, leaf and root; buds, grasshaulms, stolons, runners, rhizomes, corms, tubers, bulbs, spines and thorns, tendrils, cladodes, phyllodes, compound leaves, etc.; the growing point of stems; the origin of new leaves and buds. The cell and the cell theory; protoplasm as the physical basis of life; protoplasmic movement; turgidity; the structure and division of the nucleus; the origin of new cells by cell division. The internal morphology of the stem of monocotyledons and of dicotyledons; the function of vascular bundles; the cambium and the secondary thickening of stems and roots; the secondary protective tissues, cork and bark. The leaf as an organ for carrying on the

process of photosynthesis; the epidermis, including hairs and stomata, vascular bundles, mesophyll, and intercellular spaces; photosynthesis (carbon assimilation); the nature and function of chlorophyll corpuscles and of chlorophyll; the evacuation of the products of photosynthesis and their ultimate fate. The root: its root-tip, root hairs, and mode of branching; the growing point. Climbing plants: stem-climbers and tendril climbers; the physiology of climbing; lateral geotropism, reactions to the stimulus of contact. The elementary facts in the nutrition of the plant; the nature and sources of the raw food materials; the necessary chemical elements and their mode of absorption; water cultures; the constitution of the soil; the transpiration current; transpiration; photosynthesis; the products of metabolism, together with their distribution, storage, and utilization; respiration contrasted with photosynthesis. Carnivorous plants; Drosera, Utricularia, Sarracenia, Dionaea and Nepenthes. The classification of plants, including the main sub-divisions of the vegetable kingdom; the morphology and physiology of the following Thallophyta: Protococcus (Pleurococcus), Saccharomyces (yeast), Bacteria, Spirogyra, Fucus, Mucor, Penicillium, Psalliota campestris (mushroom). Alcoholic fermentation; Bacteria as the cause of nitrogen fixation, of fermentative processes, of putrefaction, and of disease. The Bryophyta, illustrated by a moss plant; the Pteridophyta, illustrated by a fern plant; alternation of generations. Reproduction in the Phanerogamia; the flower and its chief modifications in structural plan; the minute structure of the pollen grain and of the ovule; Pollination and its agents; floral mechanism as illustrated by the Lady Slipper Orchid, Primula, Salvia, etc. Fertilization of the ovule; development of seeds and fruits; the plum, strawberry, orange, cocoanut, etc.; dispersion of seeds and fruits; the nature of pine cones, both male and female. Two hours a week.

- 3, 4. LABORATORY COURSE IN GENERAL BOTANY. This course is designed to accompany courses 1, 2. One practical period of two hours per week.
- 3a, 4a. LABORATORY COURSE IN GENERAL BOTANY. This course for students in Arts and Science is designed to accompany courses 1, 2. One practical period of two hours fortnightly.
- 5, 6. Morphology and Physiology of the Flowering Plant. A lecture course of two hours per week.
- 7, 8. Laboratory Course on Morphology and Physiology of the Flowering Plant. Four hours per week.
- 9, 10. Systematic Botany of the Cryptogamia. A detailed treatment of the Thallophyta and Bryophyta. A lecture course of two hours per week. 1933-1934.
- 11, 12. Laboratory Course in Systematic Botany. This course is destined to accompany course 9, 10. Four hours per week. 1933-34.
- 13, 14. Systematic Botany of the Cryptogamia and Phanero-Gamia. A detailed treatment of the Bryophyta, Pteridophyta, and the facts of reproduction in the Phanerogamia. A lecture course of two hours per week. 1934-1935.

- 15, 16. LABORATORY COURSE IN SYSTEMATIC BOTANY. This course is designed to accompany course 13, 14. Four hours per week. 1934-1935.
- 17, 18. Plant Ecology, or Palaeobotany. Two lectures per week. 1933-1934.
- 19, 20. LABORATORY COURSE designed to accompany course 17, 18. Four hours per week. 1933-1934.
- 21. ADVANCED PLANT PHYSIOLOGY. Lecture course of two hours per week during the first term. 1934-1935.
- 22. ADVANCED PRACTICAL PHYSIOLOGY. This course is designed to accompany course 21. Problems in plant physiology are assigned to each student. Four hours per week during the first term. 1934-1935.
- 23. GENETICS. This course is designed to deal with the principles of genetics, especially in relation to plant life. It involves a study of the laws underlying inheritance, the causes of variation, and the physical basis of heredity. Two lectures per week during the second term. 1934-35.
- 24. Practical Genetics. This course is designed to accompany course 23. The practical features of plant breeding are dealt with in detail and a number of experiments in hybridizing are made. Four hours per week during the second term. 1934-35.

Students intending to take any Senior Honors Division Course in Botany are expected to make themselves acquainted with the Canadian families of flowering plants during the preceding summer vacation if they have not already done so. As many different species as possible should be collected and dried. The most suitable flora to consult is Gray's New Manual of Botany. Advice in respect to collecting, drying, mounting, and naming of specimens may be obtained from members of the botanical staff.

For students taking senior courses, at the beginning of the session, there will be several excursions to the prairie, woods, and river-side for the purpose of studying the algae, fungi, and flowering plants in relation to their environment.

The laboratory of the Department will be open and encouragement given to qualified students desiring to carry on research on some botanical problem.

#### TEXT BOOKS

Buller: Practical Botany; Haupt: Fundamentals of Biology; Youngken: Pharmaceutical Botany; Sargent: Plants and their Uses; For Senior Division, Maximov: Text Book of Plant Physiology; Strasburger: Text Book of Botany; Coulter, Barnes & Cowles: Text Book of Botany, vol. 1; R. C. Punnett: Mendelism; Holman & Robbins: Text Book of General Botany; McDougall: Plant Ecology; Babcock & Clausen: Genetics in Relation to Agriculture.

## DEPARTMENT OF CHEMISTRY

Matthew A. Parker, B.Sc., LL.D., F.I.C., F.C.I.C., F.R.S.C.	Professor
Henry P. Armes, B.Sc., Ph.D., F.C.I.C. Associate	Professor
Alan N. Campbell, M.Sc., Ph.D., D.Sc., F.I.C. Assistant	Professor
Paul G. Hiebert, M.A., M.Sc., Ph.D., F.C.I.C. Assistant	Professor

CHEMISTRY I A-Courses 1a, 2a; 3a, 4a.

CHEMISTRY I—Courses 1, 2; 3, 4. (Prerequisite, Grade XI Chemistry.)

CHEMISTRY II—Courses 5, 6; 7, 8. (Prerequisite, Grade XII Chemistry or Chemistry I or Chemistry IA.)

CHEMISTRY II M\*—Courses 9, 10; 11, 12. (Prerequisite, Grade XII Chemistry, Chemistry I or Chemistry IA.)

CHEMISTRY III—Courses 15, 16; 17, 18. (Prerequisite, Chemistry II.)

CHEMISTRY IIIS—Selected parts of Courses 5, 6; 7, 8; 15, 16; 17, 18. (Prerequisite, Chemistry IIM complete.)

CHEMISTRY IV—Courses 19, 20; 21, 22.† (Prerequisites, Chemistry III and Physics I.)

CHEMISTRY IV H—Courses 19, 20; 21, 22; 23, 24; 25, 26; 29, 30. (Prerequisites, Chemistry III and Physics I.)

CHEMISTRY V—Any two of Courses 31, 32; 33, 34; 35, 36; and, in addition, either 39, 40; or 41, 42. (Prerequisite for 35, 36, Mathematics II.)

First Year Pharmacy (Degree and Diploma Course) - Courses 1, 2; 3, 4.

Second Year Pharmacy (Degree Course) - Courses 15, 16; 11, 12.

Third Year Pharmacy (Degree) - Courses 19, 20; 21, 22; 23, 24; 25, 26.

Fourth Year Pharmacy (Degree) - Courses 31, 32; 39, 40.

First Year Engineering-Course 13, 14.

Fourth Year Electrical Engineering—Course 37.

Students intending to enter courses in Chemistry in the Senior Honors Division in Science are advised to consult pages 39-40 for guidance as to choice of subjects in the Junior Division and in the First Year of the Senior Division.

N.B.-For key to system of numbering courses, see page 4.

The following courses are given:

1a, 2a. ELEMENTARY INORGANIC CHEMISTRY. An introductory course leading up to the study of the fundamental principles of Chemistry; elements and compounds; laws of combination; atoms and molecules; acids, bases, salts; properties of some common elements and their more important com-

<sup>\*</sup>For students requiring standing for entrance to Medicine in two years. Others are advised to obtain pre-medical standing by completing courses in Chemistry II and Chemistry III.

<sup>†</sup>It is highly desirable that students taking Course 21, 22, should have standing in Mathematics II, or its equivalent.

- pounds. The subject is treated in an elementary way. Text book recommended, McPherson and Henderson's "An Elementary Study of Chemistry." Two hours per week lectures, and one hour tutorial.
- 1, 2. ELEMENTARY INORGANIC CHEMISTRY. Fundamental principles of chemistry; elements and compounds; laws of combination; atoms and molecules; acids, bases, salt; properties of some common elements and their more important compounds. The subject is treated in an elementary way. Text book recommended, McPherson and Henderson's "An Elementary Study of Chemistry." Two hours per week lectures, and one hour tutorial.
- 3a, 4a. PRACTICAL CHEMISTRY. Experiments illustrating general principles and the preparation and properties of substances studied in Course 1a, 2a. One period of three hours per week of practical work and one period of three hours per week of combined tutorial and practical work.
- 3, 4. Practical Chemistry. Experiments illustrating general principles and the preparation and properties of substances studied in Course 1, 2. One period of three hours per week.
- 5, 6. INORGANIC CHEMISTRY. A continuation of Course 1, 2, dealing with some of the more general subjects barely touched on in the elementary course. Two hours per week lectures. Text book, General Chemistry, by Schlesinger.
- 7, 8. INORGANIC ANALYSIS. A laboratory course in qualitative inorganic analysis and introductory quantitative analysis. Two periods of three hours per week.
- 9, 10. INORGANIC AND ORGANIC CHEMISTRY. The subjects dealt with are selected with regard to their importance for medical students. About half of the course deals with inorganic and half with organic chemistry. Three hours per week lectures. Text books, General Chemistry, by Schlesinger, and J. B. Cohen's Theoretical Organic Chemistry.
- 11, 12. Laboratory Course for 9, 10. Qualitative analysis; simple gravimetric and volumetric analysis; reactions of some organic substances; preparations. Two periods of three hours per week.
- 13, 14. QUANTITATIVE ANALYSIS leading up to methods of water analysis, coal analysis, etc., of interest to engineering students. One period of three hours per week.
- 15, 16. Organic Chemistry. An introduction to the study of organic chemistry. General principles; fatty compounds; some typical carbocyclic and a few heterocyclic compounds. Two hours per week. Text book recommended, Perkin and Kipping's Organic Chemistry.
- 17, 18. Practical Organic Chemistry. Preparation of organic compounds and study of their properties. Two periods of three hours per week.
- 19, 20. INORGANIC ANALYSIS. A laboratory course in continuation of Course 7, 8. Two periods of three hours per week, including one hour lecture demonstration.
- 21, 22. Physical Chemistry. Introduction to Physical Chemistry. Two hours per week lectures. (It is highly desirable that students attending this course should have standing in Mathematics II, or its equivalent.) Text book, Getman and Daniells, Theoretical Chemistry.

- 23, 24. PRACTICAL PHYSICAL CHEMISTRY. Physico-chemical measurements. A laboratory course. One period of three hours per week. Text book, Daniells, Mathews and Williams, Experimental Physical Chemistry.
- 25, 26. COLLOID CHEMISTRY. An introductory course on the chemistry of colloids, consisting of one lecture per week and one practical period per week throughout the session.
- 29, 30. Theory of Chemical Analysis. A course dealing with the theory of the technique and processes of analytical chemistry. One hour per week.
- 31, 32. Advanced Organic Chemistry. An advanced course on Theories, Reactions and Methods of Organic Chemistry. Two hours per week.
- 33, 34. ADVANCED INORGANIC CHEMISTRY. Chiefly descriptive inorganic chemistry; subjects chosen with reference to literature available in the Library. Two hours per week.
- 35, 36. ADVANCED PHYSICAL CHEMISTRY. A course consisting of one lecture per week (first term), two lectures per week (second term), and one practical period per week throughout the session. The lecture course forms a continuation of Course 21, 22, giving particular attention to electrochemical theory and thermodynamics. The laboratory course includes electrochemical and other advanced physico-chemical measurements. Text books, Getman and Daniells, Theoretical Chemistry; Daniells, Mathews and Williams, Experimental Physical Chemistry. (Mathematics II is a prerequisite for this course.)
- 37. ELECTRO-CHEMISTRY. Theories and laws relating to practical applications of electro-chemical processes. Two hours per week first term. Text book recommended, Mantell "Industrial Electro-Chemistry."
- 39, 40. Advanced Practical Organic Chemistry. Methods of organic analysis; organic preparations. Four periods of three hours per week.
- 41, 42. ADVANCED PRACTICAL INORGANIC CHEMISTRY. Methods of inorganic analysis, a continuation of Course 19, 20. Four periods of three hours per week.

A course of lectures on Phase Rule, suitable for M.Sc. students, is given when required. Text book: Findlay, "The Phase Rule."

Special students may be enrolled for the purpose of carrying on such advanced work as the equipment permits of, and special facilities will be given to those capable of engaging in research work.

Each student is supplied with such apparatus as may be required, with the exception of platinum wire and foil, laboratory towel, etc., which he must provide for himself.

A deposit of five dollars is paid to the Registrar at the beginning of each session, and all breakages will be made good out of this.

A record of all laboratory work must be kept in regulation report books. These are examined periodically during the session, and must be handed to the examiners in chemistry previous to the practical examination for the degree.

Attention is called to the regulation regarding practical work and reports on page 119.

# DEPARTMENT OF CLASSICS

F. W. Clark, B.A., Ph.D.	Professor	of	Latin	and	Greek
W. M. Hugill, B.A. Assistan	t Professor	of	Latin	and	Greek
Skuli Johnson, M.A. Assistani	Professor	of	Latin	and	Greek

#### GREEK

GREEK I-Courses 1, 2.

GREEK II-Courses 3, 4. (Prerequisite, Matriculation Greek or Greek I).

\*GREEK IIA—Courses 7, 8.

GREEK III—Courses 5, 6, 11, 12. (Prerequisite, Greek II.)

GREEK IV—Courses 5, 6, 11, 12. (Prerequisite, Greek III.)

GREEK IV G-Courses 5, 6, 11, 12, 13, 14. (Prerequisite, Greek III.)

GREEK IV H-Courses 5, 6, 11, 12, 13, 14. (Prerequisite, Greek III.)

GREEK V H-Courses 13, 14, 17, 18. (Prerequisite, Greek IV H.)

N.B.—For key to system of numbering courses, see page 4.

- 1. BEGINNER'S GREEK COURSE. This course is intended for students who have not had the opportunity of taking Greek for Matriculation. The purpose is to prepare students as rapidly as possible for the reading of Greek. Gleason's Greek Primer (American Book Co.), Lessons I-XXX. Four hours a week.
- 2. Beginners' Greek Course. Continuation of Course I. Gleason's Greek Primer, Lessons XXXI-LVII; and Xenophon, Easy Selections from Xenophon, pages 1-20 (Phillpotts and Jerram, Oxford Press). Sight translation. Four hours a week.
  - 3. (a) GLEASON'S GREEK PRIMER, Lessons 58, 59, 61-64, 66, 67.
- (b) XENOPHON, Selections from Xenophon's Hellenica (Phillpotts, Oxford Press), section II and section III, omitting chapter 3. Sight translation. Four hours a week.
- 4. Homer, *Iliad*, Books I-VI (Seymour, Ginn & Co.). The following extracts will be read: I, 1-317; III, 1-244; VI, 237 to end. Sight translation. Four hours a week.
- 5. Lucian, Charon (Heitland, Cambridge Press). Homer, Odyssey VI and IX (Merry, Books I-XII, Oxford Press). Sight translation. Three hours a week.
- 6. PLATO, Ion (Stock, Oxford Press) and Menexenus (Shawyer, Oxford Press). Sophocles, Ajax (Pearson, Cambridge Press). The choral odes will be read in translation. Sight translation. Three hours a week.

<sup>\*</sup>To be taken by Second Year students who, entering with Matriculation Greek, have taken Greek II in the First Year.

- 7. Demosthenes, *Philippic I* (Gwatkin, Macmillan). Homer, *Iliad* XIX and XXII (Monro, Oxford Press). Sight translation. Three hours a week. (Not given in 1933-34.)
- 8. Lucian, Vera Historia, Book II (Jerram, Oxford Press). Euripides, Medea (Bayfield, Macmillan). The choral odes will be read in translation. Sight translation. Three hours a week. (Not given in 1933-34.)
- 9. Greek Drama in Translation. The following plays: Aeschylus, Agamemnon (Murray); Sophocles, Oedipus, The King and Antigone (Murray); Euripides, Iphigenia in Tauris (Murray); Aristophanes, Plutus (Sanford). These plays are all found in Ten Greek Plays, translated by Gilbert Murray and Others (Oxford Press). One hour a week. (Not given in 1933-34.)
- 10. Greek Antiquities. Greek private life, education, religion, national games; the public buildings of Athens. Assigned readings and reports. One hour a week. (Not given in 1933-34.)
- 11. GREEK HISTORY. Bury's History of Greece, chapters IV (p. 180) to IX. Lectures and reading on the period from 500 B.C. to 431 B.C. The Persian Wars, the development of the democracy in Athens and the growth of the Athenian Empire. Special topics and papers will be assigned. One hour a week.
- 12. Greek History. Continuation of 9, involving a study of Bury's History of Greece, chapters X to XVII, omitting XV. Lectures and readings on the period from 431 B.C. to 338 B.C. The Peloponnesian War, the Spartan and Theban hegemonies, the rise of Philip of Macedon and the campaigns of Alexander. Special topics and papers will be assigned. One hour a week.
- 13. Homer, Odyssey (Merry, Oxford Press). Books XVI, XXI, XXIII. Herodotus (Shuckburgh, Cambridge Press). Book VI, chapters 1-8, 10-21, 25-31, 34-51, 73-82, 84-136. Sight translation. Four hours a week.
- 14. Sophocles, Antigone (Shuckburgh, Cambridge Press.) Aristophanes, Clouds (Merry, Oxford Press). Sight translation. Four hours a week.
- 15. Plato, Protagoras (Adam, Cambridge Press). Lysias, Eratosthenes (Thompson and Mills, University Tutorial Press). Sight translation. Four hours a week. (Not given in 1933-34.)
- 16. AESCHYLUS, Prometheus Bound (Prickard, Oxford Press). THEOCRITUS, Idyls 6, 7, 13, 15, 18, 28 (Kynaston, Oxford Press). ARISTOPHANES, Acharnians (Merry, Clarendon Press). Sight translation. Four hours a week. (Not given in 1933-34.)
- 17. THUCYDIDES, Book VII (Marchant, Macmillan). Sight translation. Four hours a week.
- 18. Plato, Republic, Books I-III (Adam, Cambridge Press). Sight translation. Four hours a week.
  - M.A. Courses will be outlined by the Department on request.

#### LATIN

LATIN I—Courses 1, 2; 3, 4. (Prerequisite, Matriculation Latin.)

LATIN II—Courses 5, 6. (Prerequisite, Latin I.)

LATIN III—Courses 7 and 8 or 9 and 10; with 13, 14. Prerequisite, Latin II.)

LATIN IV—Courses 7 and 8 or 9 and 10; with 15, 16. (Prerequisite, Latin III.)

LATIN IV G—Courses 7, 8, 9, 10, 15, 16, 19, 20. (Prerequisite, Latin III.)

LATIN IV H—Courses 7, 8, 9, 10, 15, 16, 19, 20. (Prerequisite, Latin III.)

LATIN V H—Courses 9, 10, 19, 20, 21, 22. (Prerequisite, Latin IV H.)

N.B.—For key to system of numbering courses, see page 4.

1, 2. Grammar, Composition and Sight Translation. In preparation for this paper students will be expected to provide themselves with D'Ooge: Concise Latin Grammar (Ginn & Co.). Questions on Grammar will be set involving a knowledge of forms. In Composition sentences will be given for translation, based on the vocabulary of the prescribed prose authors and on the following principles of syntax: (a) First Term: the common case constructions; indirect statements; purpose clauses; result clauses; participles; direct and indirect questions; direct and indirect commands, intransitive verbs. (b) Second Term: the constructions set down for the First Term; gerund and gerundive; temporal clauses; causal clauses; conditional clauses (regular types); constructions after verbs of preventing and fearing; subordinate clauses in indirect narration. Two hours a week.

(Sets of sentences illustrating the above constructions are available at a nominal cost.)

3, 4. AUTHORS (A knowledge of the syntax and subject matter of the Authors read is also required.) First Term: (a) AULUS GELLIUS, Selected Stories, edited by Nall (Macmillan's Elementary Classics). Selections VI, VIII, X-XII, XV-XVIII, XXI-XXIII, XXVII-XXX, XXXV, XXXVI. (b) LIVY, Selections 19-35, edited by Laming (Macmillan's Elementary Classics). Second Term: (a) Cicero, Letters 1, 2, 3, 5, 8, 11, 12, 13, 15, 16, 20, 23, in New Cicero edited by Bennet (Allyn and Bacon). (b) OVID, Readings from the Metamorphoses edited by Duthie (Clarke, Irwin & Co., Toronto). Selections 1, 2, 4, 9, 11, 17, 18, 21 (ll. 20-60), 22. Two hours a week.

(For purposes of examination Latin shall be regarded as a single subject. Marks will be allotted to the various sections as follows: Prescribed Translation, 35%; Grammar, Syntax and Subject Matter of Prescribed Authors 20%; Sight Translation, 15%; Prose Composition, 30%.)

5, 6. AUTHORS AND SIGHT TRANSLATION. A knowledge of the syntax and subject matter of the Authors read is also required. Twenty per cent. of the paper will be assigned to Sight Translation. First Term: Selections from A Latin Reader (Petrie, Oxford Press). (a) Livy, 50, 51, 52, 53, 54, 56, 58, 59, 60, 61, 62, 64. (b) CATULLUS, 73, 75, 76, 77, 78, 79, 80, 85, 86. (c) VIRGIL, 91, 92, 97, 98, 100, 102, 103. Second Term: (a) Cicero, Pro Lege Manilia (Bennett, Allyn and Bacon). (b) Horace, Odes,

Book I, edited by Page (Macmillan's Elementary Classics), Nos. 1-4, 9, 11, 14, 22, 24, 29, 34, 35, 37, 38. Four hours a week.

Students who elect Latin as a subject in the Third and Fourth Years should provide themselves with: A Latin Dictionary (Lewis' Latin Dictionary for Schools, Oxford Press), Latin Literature (Mackail: Murray), A Classical Atlas (Atlas of Classical Geography, Everyman's Library).

7, 8. PROSE COMPOSITION. Translation into Latin of representative passages from English authors. One hour a week.

Students taking Latin IV G are offered an option between Prose Composition and additional reading in some Latin Author. The selected Author for 1933-34 is CAESAR, Bellum Gallicum, Book VII.

- 9, 10. Roman Antiquities. Course of lectures particularly on Roman Private Life and on the Topography and Buildings of Ancient Rome, illustrated by lantern Slides. Text book: Tucker, Life in the Roman World of Nero and St. Paul. Other books to which the student will be referred are: Johnston, Private Life of the Romans; Rogers and Harley, The Life of the Romans (translated); Jones, Companion to Roman History; Friedlaender-Freese, Roman Life and Manners under the Early Empire; Sandys', Companion to Latin Studies; Platner, Ancient Rome; Fowler, Social Life at Rome in the Days of Cicero, One hour a week.
- 11, 12. Roman History. A general course dealing with the main events in the history of Rome from the foundations of the Republic down to the end of the first century of the Empire, and with the contribution of Rome to later civilizations. Frank, History of Rome. Some valuable books for reference and study of special topics are: How and Leigh, History of Rome to the Death of Julius Caesar; Fowler, Rome; Boak, History of Rome; Jones, The Roman Empire; Taylor, Constitutional and Political History of Rome; Bailey, The Legacy of Rome. One hour a week. (Not given in 1933-34.)
- 13. (a) PLINY, Select Letters, by Westcott (Allyn and Bacon). Letters 6, 14, 18, 31, 38, 41, 43, 45, 48, 69, 70, 75, 79, 91, 95, 96, 109, 110. (b) MARTIAL, Select Epigrams, Volume II, ed. by Bridge and Lake (Oxford Press). VII: 3, 16, 25, 32, 33, 36, 43, 48, 61, 64, 83, 84, 86, 92; VIII: 9, 10, 12, 18, 27, 29, 43, 47, 58, 62, 67, 69, 76; IX: 6, 8, 10, 15, 30, 46, 52, 53, 68, 70, 78, 81, 97, 98; X: 1, 8, 9, 24, 39, 46, 47, 61, 62, 70, 74, 96, 104; XII: 18, 31, 68, 87. †Sight translation. Three hours a week.
- 14. (a) CICERO, Pro Archia (Bennett, Allyn and Bacon); (b) VIRGIL, Aeneid, Bks. IV (omitting lines 450-521) and VI, lines 264 to end (Sidgwick, Cambridge Press). Sight translation. Three hours a week.
- 15. (a) LIVY, Book XXI (Dimsdale, Cambridge Press), chapters 4, 7-9, 14, 16, 21, 26-33, 35, 37. (b) VIRGIL, Eclogues I, IV, VIII, Georgics I: 1-42; 118-146; 287-310; 463-514. II: 136-176; 371-396; 458-542. III: 72-91; 103-112. IV: 67-87; 116-190; 460-515 (Sidgwick, Cambridge Press). †Sight translation. Three hours a week.
- 16. (a) CICERO, Select Letters (Prichard and Bernard, Oxford Press). Nos. 4, 10, 15, 20, 21, 23, 26, 28, 34, 36, 37, 41, 45, 46, 57, 58. (b) HORACE, Odes, III: 1, 2, 5, 9, 13, 18, 21, 23, 28, 29, 30. Satires, I: 5, 9.

<sup>†</sup>In the papers of the Senior Division 25 percent is assigned to sight translation.

- Epistles, I: 2, 4, 7, 10, 11, 20 (Horace, Complete Works, edited by Bennett and Rolfe, Allyn and Bacon). Sight translation. Three hours a week.
- 17. HORACE, Odes, II, IV (Selected); Satires, I: 6, and II: 5, 6, 8. 1 †Sight translation. Three hours a week. (Not given in 1933-34.)
- 18. VIRGIL. A selection of about 1500 lines chosen from Books VII-XII. ROMAN ELEGIAC POETS (a) Tibullus, I: 1, 3; II: 1; (b) Propertius, I: 2, 10; II: 10, 12, 13, 27, 31; III: 7; IV: 6, 11 (ll. 1-14, 73-102). (c) OVID, Amores, I: 15; II: 6; III: 9, 15. (Roman Elegiac Poets, by Harrington, American Book Co.). Sight translation. Three hours a week. (Not given in 1933-34.)
- 19. PLAUTUS, *Trinummus* (Freeman and Sloman, Oxford Press). TERENCE, *Adelphi* (Sloman, Oxford Press). †Sight translation. Three hours a week.
  - 20. CICERO. (a) Pro Milone (Poynton, Oxford Press).
- (b) Philippic II (Philippics, King and Clark, Oxford Press). Sight translation. Three hours a week.
- 21. SALLUST, Catiline (Summers, Cambridge Press). Lucretius, De Rerum Natura. Not less than 1500 lines will be read selected from Bks. 1, 3, 5 (Bks. I-III, Lee, Macmillan; Bk. V, Duff, Cambridge Press). †Sight translation. Four hours a week.
- 22. TACITUS, Annals I, II (Abridged edition, by Furneaux, Oxford Press). JUVENAL, Satires, 1, 3, 10, 14 (Hardy, Macmillan). Sight translation. Four hours a week.
  - M.A. Courses will be outlined by the Department on request.

#### DRAWING

Milton Smith Osborne, B.Arch., M.Sc. (Arch.) Professor of Architecture R. W. Moffatt, B.A.Sc. Associate Professor of Civil Engineering John A. Russell, B.Sc. (Arch.), M.Arch. Assistant Professor of Architecture

MECHANICAL DRAWING I—Courses 1, 2. (Available only with Mathematics IA.)

ARCHITECTURAL DRAWING I—Courses 3, 4; 5, 6. (Available only with Mathematics IA.)

N.B.—For key to system of numbering courses, see page 4.

1, 2. MECHANICAL DRAWING. Use of instruments; geometrical problems; elementary principles of orthographic, oblique and axonometric projections; the application of such principles to the solution of problems relating to straight lines and planes; intersections and developments; plans, elevations and sections of solids; simple structural details and machine parts; bolts, screws, keys and rivets; elements of perspective as used in sketching; sketches and working drawings of machine pieces; isometric drawing; letter-

<sup>†</sup>In the papers of the Senior Division 25 percent is assigned to sight translation.

ing, shade lines and line shading. Lectures, one hour per week; practical work, three hours per week; both terms. Text book, "Engineering Drawing," by T. E. French. Associate Professor Moffatt.

- 3, 4. ELEMENTS OF ARCHITECTURE. A study of the elements of buildings derived from classic precedent, including the Greek and Roman orders; architectural lettering; the principles and methods of architectural drawing and rendering in wash, illustrated by problems in the orders and elementary composition. Lectures, one hour per week; practical work, three hours per week; two terms. Esquié, "Five Orders of Architecture."
- 5. SHADES AND SHADOWS. Planned to give the fundamental knowledge necessary for casting the conventional shadows employed in architectural design. Given by means of drawing-room work in the nature of test-exercises based on lectures and text book preparation. Lectures, one hour per week; practical work, three hours per week; first term. Gardner, "Notes on Shades and Shadows."
- 6. Perspective. The fundamental phenomena of appearance, the general theory of conical projection, and its application to perspective, the method of revolved plan upon which all shorter methods are based, curves, and apparent distortion. The subject is continued with the study of direct division, direct measurement, relations between lines and points in the vanishing-point diagram, the cubic system, method of perspective plan, and shadows. Also given by means of drawing-room exercises in the nature of test-exercises based on lectures and text book preparation. Lectures, one hour per week; practical work, three hours per week; second term. Lawrence, "Principles of Architectural Perspective."

# DEPARTMENT OF ENGLISH

W. T. Allison, M.A., Ph.D.	Professor
Aaron J. Perry, M.A.	Professor
R. Fletcher Argue, M.A. Assistant	Professor
A. Lloyd Wheeler, M.A., Ph.D. Assistant	Professor
Doris Saunders, M.A.	Lecturer

English I—Courses, 1, 2. (Prerequisite, Matriculation English.)

ENGLISH II—Courses 3, 4. (Prerequisite, English I.)

ENGLISH II A—Courses 2, 4, (Prose). (Prerequisite, English I.)

ENGLISH III—Courses 5, 6, 7, 8. (Prerequisite, English II.)

ENGLISH IV—Courses 9, 10, 11, 12. (Prerequisite, English III.)

ENGLISH IV G—Courses 9, 10, 11, 12, 13, 14, 15, 16. (Prerequisite, English III.)

English IV H—Courses 9, 10, 11, 12, 13, 14, 15, 16. (Prerequisite, English III.)

ENGLISH V—Courses 17, 18, 19, 20, 21, 22, 23, 24. (Prerequisite English IV H.)

Note—Every student should own a good English Dictionary. The Concise Oxford Dictionary is recommended.

N.B.—For key to system of numbering courses, see page 4.

- 1, 2. English Poetry and Prose. An introductory survey of English Literature, Poetry and Prose. First Year Arts, First and Second Terms. Four hours a week.
- (1) First Term: (a) ENGLISH POETRY. Text: "Greater English Poets," edited by Crawford, Perry and Woodhouse (Macmillan). The following poems:

Milton-On Shakespeare; L'Allegro; Il Penseroso;

Dryden—Alexander's Feast; Pope—The Rape of the Lock;

Gray—Ode on a Distant Prospect of Eton College; Elegy Written in a Country Churchyard;

Goldsmith-The Deserted Village;

Cowper-On the Receipt of My Mother's Picture; The Castaway;

Blake—Selections in text; Burns—Selections in text;

Wordsworth—Simon Lee; Lines Composed a Few Miles Above Tintern Abbey; The Reverie of Poor Susan; We Are Seven; She was a Phantom of Delight; My Heart Leaps Up; The Solitary Reaper; At the Grave of Burns; Composed upon Westminster Bridge; On the Sea-Shore near Calais; I Wandered Lonely as a Cloud; The World Is Too Much With Us;

Coleridge-The Ancient Mariner; Kubla Khan;

Scott-Selections in text.

(b) English Prose—

Bible—The Book of Ruth (King James Version);

Pepys-Diary (Nelson);

Bunyan—Pilgrim's Progress, Part 1 (Nelson's Classics); Swift—Gulliver's Travels, Parts I and II (Macmillan); Defoe—Robinson Crusoe, Part I (Nelson's Classics);

Goldsmith—The Vicar of Wakefield (Nelson's Classics); She Stoops to Conquer (Macmillan);

(2) Second Term: (a) ENGLISH POETRY. Text: "Greater English Poets:" edited by Crawford, Perry, and Woodhouse (Macmillan). The following poems:

Byron—She Walks in Beauty; The Prisoner of Chillon; Selections from

Childe Harold;

Shelley-Ode to the West Wind; The Cloud; To a Skylark;

Keats—The Eve of St. Agnes; Ode on a Grecian Urn; La Belle Dame Sans Merci; Ode to a Nightingale;

Tennyson—The Lady of Shalott; Œnone; The Lotos-Eaters; Ulysses;

Break, Break; Tithonus; Crossing the Bar;

Browning—Incident of the French Camp; My Last Duchess; Count Gismond; Home-Thoughts from Abroad; Home-Thoughts from the Sea; Up at a Villa—Down in the City; Andrea del Sarto; Prospice; Asolanda; Epilogue;

Arnold—The Forsaken Merman; Rugby Chapel; Dover Beach;

Arnold-Sohrab and Rustum (Houghton Mifflin Co.);

Rossetti-The Blessed Damozel;

Swinburne—The Garden of Proserpin;

Hardy-Selections in text; Carman—Selections in text; Yeats—Selections in text; Kipling—Selections in text; McCrae-Selections in text; Masefield—Selections in text; Noyes-The Highwayman; Brooke-Selections in text. (b) ENGLISH PROSE— Scott—Old Mortality (Nelson's Classics); Dickens-Pickwick Papers (Everyman, Dent); Hardy-Far from the Madding Crowd (Macmillan); Conrad-Typhoon (Heinemann); Shaw—Arms and the Man (Constable); Kipling-Selected Stories, ed. W. L. Phelps (Doubleday); Some Canadian Essays (Nelson).

References: The Story of English Literature, by E. K. Broadus (Macmillan); A Biographical Dictionary of English Literature (Everyman, Dent); Tutorial History of English Literature, by A. J. Wyatt (University Tutorial Press); A History of English Literature, by John Buchan (Nelson); English Men of Letters Series (Macmillan).

- 3, 4. ENGLISH POETRY AND PROSE. Second Year Arts, First and Second Terms. Four hours a week.
  - (1) First Term: (a) English Poetry—

Chaucer—The Prologue; The Nun's Priest's Tale (Macmillan Pocket Edition);

Spenser-The Faerie Queene, Book I, Canto I;

Milton—Paradise Lost, Book I; Lysidas; Sonnets I, II, VIII, XIII, XVI, XVIII, XIX, XXII, XXIII.

Text: "Greater English Poets," edited by Crawford, Perry, and Woodhouse (Macmillan).

Note: The course involves a knowledge of the life and times of the authors read, and an ability to render Chaucer into modern English prose.

References: The Story of English Literature, by E. K. Broadus (Macmillan); Spenser, Milton, in English Men of Letters Series (Macmillan); Chaucer, Spenser, Milton, in Dictionary of National Biography; A Biographical Dictionary of English Literature (Everyman, Dent).

(b) English Prose. Bacon—The Essays of Francis Bacon, edited by C. S. Northup (Houghton, Mifflin Co.). The following essays: Numbers 1, 5, 10, 11, 13, 16, 17, 18, 23, 27, 29, 36, 42, 50;

Addison—Select Essays of Addison, edited by Samuel Thurber (Allyn and Bacon, Boston). Selections, pages 1-80, 80-89, 104-122, 141-167, 177-180, 187-206, 213-220;

Boswell—A Shorter Boswell, edited by Bailey (Nelson); Lamb—Essays of Elia (King's Treasuries, Dent).

(2) Second Term: (a) ENGLISH POETRY. Shapespeare—The following plays: Romeo and Juliet; Macbeth; Antony and Cleopatra. Texts: "The New Hudson Shakespeare" (Ginn).

References: An Introduction to Shakespeare, by MacCracken and others (Macmillan); Shakespeare, His Life and Work, by Oliphant Smeaton (Everyman, Dent); Biographies of Shakespeare, by Sidney Lee, Joseph Quincy Adams and E. K. Chambers.

# (b) ENGLISH PROSE—

Macaulay—History of England, chapter III (King's Treasuries, Dent); Carlyle—Signs of the Times; Essay on Burns; Inaugural Address at Edinburgh (Everyman);

Ruskin—The Open Sky; Mountain Glory; Greatness in Art; St. Mark's; Nature of Gothic; Roots of Honour (Modern Student's Library, Scribners);

Arnold—Sweetness and Light; The Function of Criticism; Literature and Science (Houghton, Mifflin Co.);

Huxley—On the Advisableness of Improving Natural Knowledge; A Liberal Education; On a Piece of Chalk (Macmillan).

Reference: A Nineteenth Century Literature, by George Saintsbury (Macmillan).

- 5. CHAUCER AND ENGLISH MEDIÆVAL LITERATURE. A detailed study of Chaucer, and assigned readings in texts of the mediæval period.
- (a) Chaucer—The Canterbury Tales; The Prologue; The Knightes Tale; The Nonne Preestes Tale; The Pardoners Tale; The Clerkes Tale; The Squieres Tale. Texts: Selections from Chaucer, edited by E. A. Greenlaw (Scott, Foresman); The Clerkes Tale and The Squieres Tale, edited by Lilian Winstanley (Cambridge); The Poetry of Chaucer, by R. K. Root (Houghton, Mifflin Co.).
- (b) Mediæval Literature—The Wakefield Second Shepherd's Play (Everyman, Dent); Langland's Piers Plowman (Everyman, Dent); French Mediæval Romances, translated by Eugene Mason (Everyman, Dent); The Mabinogion, translated by Lady Charlotte Guest (Everyman, Dent); Froissart's Chronicles (Everyman, Dent).

References: A Chaucer Handbook, by R. D. French (Crofts); Chaucer and His Poetry, by G. L. Kittredge (Harvard University Press); Some New Light on Chaucer, by J. M. Manly (Holt); Three Mediæval Centuries of Literature in England, 1100-1400, by C. S. Baldwin (Little, Brown and Co.); English Literature from the Norman Conquest to Chaucer, by W. H. Schofield (Macmillan). Third Year Arts, First Term. Two hours a week.

6. SHAKESPEARE. The Merchant of Venice; Henry V; As You Like It; Hamlet; Othello; Macbeth (New Hudson Shakespeare, Ginn). Introduction to Shakespeare, by MacCracken and others (Macmillan); A Life of Shakespeare, by Joseph Q. Adams (Houghton Mifflin Co.).

References: A Life of Shakespeare, by Sidney Lee (Macmillan); Hamlet, An Ideal Prince, and other Essays, by A. W. Crawford (The Copp Clark Co.); Elizabethan Literature, by Saintsbury (Macmillan); History of English Dramatic Literature, by A. W. Ward (Macmillan); Elizabethan Drama, by F. E. Schelling (Houghton Mifflin Co.). Third Year Arts, Second Term. Two hours a week.

7. MILTON. (a) POETRY: Comus; Sonnets; Paradise Lost, Books I, II, III, IV, IX; Samson Agonistes. (b) Prose: Of Education; Areopagitica;

The Tenure of Kings and Magistrates. Text: Milton's Prose, selected and edited by Malcolm W. Wallace (World's Classics, Oxford).

References: The Tenure of Kings and Magistrates, edited by W. T. Allison (Holt); Milton, by John Bailey (Home University Library); A Milton Handbook, by James H. Hanford (Crofts). Third Year Arts, First Term. Two hours a week.

8. RESTORATION AND EIGHTEENTH CENTURY LITERATURE. (Dryden to Burns.)

## (a) POETRY—

Dryden—Annus Mirabilis; Absalom and Achitophel, Part I; Religio Laici; The Hind and the Panther, Part I. Text: "Dryden, Select Poems," edited by Christie (Oxford);

Pope—Ode on Solitude; Essay on Criticism; Elegy on an Unfortunate Lady; Essay on Man; Epistle to Dr. Arbuthnot; To Augustus; Epilogue to the Satires, Dialogue II. Text: Pope, Selected Poems, edited by Bredvold (Crofts), or by Sherburn (Nelson);

Selections from Dryden, Swift, Pope, Thomson, Johnson, Collins, Gray, Goldsmith (The Traveller) in English Poems, Restoration and Eighteenth Century, edited by Bronson (University of Chicago Press);

Ballads. Text: "Old English Ballads," edited by Wm. D. Armes (Macmillan).

# (b) Prose—

Swift-Battle of the Books (Everyman, Dent);

Johnson-Lives of Cowley and Dryden, Vol. 1 (World's Classics);

Boswell—Life of Johnson, edited by Chas. S. Osgood (Modern Student's Library, Scribners).

Gibbon-Autobiography (World's Classics).

References: A History of Eighteenth Century Literature, by Gosse (Macmillan); Dryden, Swift and Pope, in English Men of Letters Series (Macmillan); Dr. Johnson and His Circle, by Bailey (Home University Library); A History of English Romanticism in the Eighteenth Century, by H. A. Beers (Holt).

Third Year Arts, Second Term. Two hours a week.

#### 9. ROMANTIC POETRY.

Wordsworth—Lines Written in Early Spring; Expostulation and Reply; The Tables Turned; The Old Cumberland Beggar; Nutting; Three Years She Grew in Sun and Shower; Matthew; The Prelude; Michael; Resolution and Independence; The Green Linnet; Stepping Westward; To the Cuckoo; Ode to Duty; To a Skylark; Elegiac Stanzas; Character of the Happy Warrior; Ode: Intimations of Immortality; To a Skylark; Scorn Not the Sonnet;

Coleridge-Christabel; France: An Ode; Dejection: An Ode.

Byron—English Bards and Scotch Reviewers; From Childe Harold's Pilgrimage; The Isles of Greece; On This Day I Complete my Thirty-Sixth Year; Selected Lyrics;

Shelley—Hymn to Intellectual Beauty; Lines Written among the Euganean Hills; Stanzas; The Sensitive Plant; Epipsychidion; Adonais; Selected Lyrics;

Keats-Sleep and Poetry; Isabella, or The Pot of Basil; Bards of Passion

and of Mirth; Ode on Melancholy; Ode on a Grecian Urn; Ode to a Nightingale; Lamia; To Autumn; Sonnets; Letters.

Text: English Poetry and Prose of the Romantic Movement, edited by George B. Woods (Scott, Forseman).

References: Wm. Wordsworth, by G. M. Harper (Murray); The Early Life of Wordsworth, by E. Legouis (Dodd); S. T. Coleridge, by J. D. Campbell (Macmillan); Byron, by Ethel C. Mayne (Scribners); Shelley, The Man and the Poet, by Clutton-Brock (Methuen); Keats, by Sidney Colvin (Macmillan). Fourth Year Arts, Pass and Honors, First Term. Two hours a week.

## 10. VICTORIAN POETRY.

Tennyson—Mariana; The Poet; A Dream of Fair Women; You Ask Me Why; Of Old Sat Freedom; Love Thou Thy Land; Locksley Hall; Songs from the Princess; In Memoriam; Ode on the Death of the Duke of Wellington; Maud; The Higher Pantheism; To Virgil; Frater Ave atque Vale;

Browning—The Lost Leader; The Laboratory; Love Among the Ruins; Saul; By the Fireside; Two in the Campagna; One Way of Love; Another Way of Love; The Last Ride Together; Porphyria's Lover; Childe Roland; Karshish; Fra Lippo Lippi; Abt Vogler; Rabbi Ben Ezra; Confessions; Apparent Failure;

Arnold—Sonnet; To a Friend; Shakespeare; Self-Dependence; The Future; Requiescat; The Scholar Gipsy; Stanzas from the Grand Chartreuse; East London; West London; Growing Old; Immortality; The Last Word.

Text: Victorian Poetry, edited by C. E. Andrews and M. O. Percival (R. S. Adams, Columbus).

References: Lives of the above poets in English Men of Letters Series (Macmillan): The Literature of the Victorian Era, by Hugh Walker (Cambridge); Survey of English Literature, 1830-1880, by Oliver Elton (Edward Arnold); History of English Literature, by Legouis and Cazamian (Dent). Fourth Year Arts, Pass and Honors, Second Term. Two hours a week.

11. The English Novel. Development to the middle of the nineteenth century. Hopkins and Hughes, Extracts from the English Novel before the Nineteenth Century (Ginn); Richardson's Pamela (Everyman); Fielding's Joseph Andrews (Everyman); Goldsmith's Vicar of Wakefield (Nelson's Classics); Maria Edgworth's Castle Rackrent (Everyman); Walpole's Castle of Otranto (Hopkins and Hughes); Mrs. Shelley's Frankenstein (Everyman); Scott's Heart of Midlothian (Nelson's Classics); Jane Austen's Pride and Prejudice (Nelson's Classics); Dickens's Oliver Twist (Nelson's Classics); Hawthorne's The Scarlet Letter (Everyman); Thackeray's Vanity Fair (Everyman); Trollope's Barchester Towers (Everyman); George Eliot's Middlemarch (Collins);

Text: The History of the Novel in England, by Lovett and Hughes (Houghton Mifflin Co.).

References: Development of the English Novel, by W. L. Cross (Macmillan); The English Novel (to Scott), by Sir Walter Raleigh (Murray); The Advance of the English Novel, by Wm. Lyon Phelps (Macmillan); Motives in English Fiction (to Dickens), by Robt. N. Whiteford (Putnam). Fourth Year Arts, Pass and Honors, First Term. Two hours a week.

12. VICTORIAN AND GEORGIAN PROSE. Imaginative prose from the middle of the nineteenth century to the present.

Landor's Imaginary Conversations (World's Classics); Borrow's Lavengro (Everyman); Stevenson's Virginibus Puerisque (Everyman); Pater's Marius the Epicurean (Macmillan); Meredith's Ordeal of Richard Feveral (The Modern Library); Hardy's Return of the Native (Scribners); Stevenson's Master of Ballantrae (Macmillan's Pocket Classics); Barrie's The Little Minister (Cassell); Wm. De Morgan's Joseph Vance (Nelson); Conrad's Lord Jim (Doubleday); Bennett's Old Wives' Tale (Nelson); Galsworthy's The Man of Property (Heinemann).

References: Development of the English Novel, by W. L. Cross (Macmillan); The Modern English Novel, by Abel Chevalley (Macmillan); A Century of the English Novel, by Cornelius Weygandt (Century Co.). Fourth Year Arts, Pass and Honors, Second Term. Two hours a week.

Note—(As preparation for class study, students should read part of novels in Courses 11 and 12 during the preceding summer.)

Reference: English Literature before Chaucer, by P. G. Thomas (Edward Arnold). Fourth Year Arts, Honors, First Term. Two hours a week.

14. MIDDLE ENGLISH. A Middle English Reader, edited by O. F. Emerson (Macmillan); Translations of Piers the Plowman, Pearl, and Sir Gawain and The Green Knight, in Romance, Vision, and Satire, edited by Jessie L. Weston (Houghton Mifflin Co.); Translation of The Owl and the Nightingale, in The Chief Middle English Poets, edited by Jessie L. Weston (Houghton Mifflin Co.).

References: Three Mediæval Centuries of Literature in England, 1100-1400, by C. S. Baldwin (Little, Brown and Co.); English Literature before Chaucer, by P. G. Thomas (Edward Arnold); Long Will, A Romance by Florence Converse (Everyman). Fourth Year Arts, Honors, Second Term. Two hours a week.

- 15. Spenser and Non-Dramatic Literature of the Sixteenth and Seventeenth Centuries. (a) Poetry: Spenser's Faerie Queen, Book V; The Shepherd's Calendar, Eclogue X, October; Hymn of Heavenly Beauty; Hymn of Heavenly Love; selections from Wyatt to Waller, with special study of the following poets: Spenser, Marlowe, Shakespeare, Campion, Drayton, Jonson, Donne, Herbert, Herrick, Vaughan, Cowley, Waller, Marvell. Texts: The Oxford Spenser: English Poems, Elizabethan Age and Puritan Period, edited by Bronson. (University of Chicago Press.)
- (b) Prose: English Prose, Wycliffe to Clarendon, edited by Peacock (World's Classics), pp. 180-231; 237-254; 259-306; 310-324; 420-459; 465-471; 478-553; English Critical Essays, Sixteenth to Eighteenth Centuries edited by Jones (World's Classics), pp. 1-115; More's Utopia, Book II, edited by Collins (Oxford); Lyly's Euphues (Arber's Reprints); Sidney's Defence of Poetry (Arber's Reprints); Ascham's The Schoolmaster, Book I (Arber's Reprints); Hooker's Laws of Ecclesiastical Polity, Book I, edited by

Church (Oxford); Bacon's Advancement of Learning, Book II, and New Atlantis (World's Classics). Fourth Year Arts, Honors, First Term. Two hours a week.

16. American, English (Contemporary) and Canadian Poetry.

Texts: American Poetry, edited by P. H. Boynton (Scribners); An Anthology of Modern Verse (Methuen); The Oxford Book of Canadian Verse (Oxford).

References: A Handbook of Canadian Literature, by V. B. Rhodenizer (Graphic Publishers); Headwaters of Canadian Literature, by Archibald MacMechan (McClelland and Stewart); Studies of Contemporary Poets, by Mary C. Sturgeon (Dodd); American Literature, by P. H. Boynton (Ginn). Fourth Year Arts, Honors, Second Term. Two hours a week.

17. THE THEORY OF POETRY. A consideration of the principles of poetic composition and their application to particular forms:

Aristotle's Poetics (Butcher's translation); Burke's A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful; Lessing's Laocoon (De Quincey's Translation, with his notes); Pope's The Art of Sinking in Poetry; Song by a Person of Quality; Addison's Essay on Metaphor (Spectator No. 595); Shelley's A Defence of Poetry; Hazlitt's On Poetry in General (Lectures on the English Poets); Coleridge's Biographia Literaria, chapter XV; On Poesy or Art; Bridges' Milton's Prosody; Babbitt's The New Laocoon; Abercrombie's Principles of English Prosody. Fifth Year Arts, Honors, First Term. Two hours a week.

18. Drama. (a) Sophocles: Oedipus, translated by Gilbert Murray; Euripides; The Bacchae, translated by Gilbert Murray. (b) Everyman: Marlowe's Doctor Faustus; Jonson's The Alchemist; Dryden's All for Love; Congreve's The Way of the World; Sheridan's The School for Scandal; Wilde's Lady Windermere's Fan. Text: British Drama, edited by Lieder, Lovett and Root (Houghton Mifflin Co.). (c) Contemporary Drama: Ibsen, Shaw, Galsworthy, Barrie, Masefield, The Irish School, as prescribed.

References: History of English Dramatic Literature, by A. W. Ward (Macmillan); Elizabethan Drama, by F. E. Schelling (Houghton Mifflin Co.); Aspects of Modern Drama, by F. W. Chandler (Macmillan); The Modern Drama, by L.Lewisohn (Viking Press). Fifth Year Arts, Honors, Second Term. Two hours a week.

- 19. MASTERPIECES OF EUROPEAN LITERATURE. A reading course of some of the more important works in the tradition of European literature: Homer's Iliad, Odyssey (Macmillan); Plato's Apology, Crito, Phaedo (Modern Library); Virgil's Aeneid (World's Classics); Grettir Saga (Everyman); Niebelungenlied (Everyman); Dante's Divine Comedy (Everyman); Montaigne's Essays (Oxford, or Bohn); Cervantes' Don Quixote (Everyman); Goethe's Faust (Bohn). Fifth Year Arts, Honors, First Term. Two hours a week.
- 20. NINETEENTH CENTURY PROSE. A study, under direction, of some of the main tendencies in English thought from 1789 to 1900. Texts: Burke's Reflections on the French Revolution (Everyman); Paine's Rights of Man (Everyman); Carlyle's Sartor Resartus, and Heroes and Hero-Worship

(Everyman); Mill's Utilitarianism and Liberty (Everyman); Newman's Idea of a University (Everyman); Darwin's Origin of Species (Everyman); Arnold's Culture and Anarchy (Nelson).

The following additional texts, not appearing in suitable editions, are to be read in the University Library: Essays from Coleridge's The Friend and Aids to Reflection, to be prescribed; Macaulay's Essay on Southey's Colloquies on Society; three essays on Utilitarianism (Macaulay's Miscellaneous Writings); Ruskin's Unto This Last, the Nature of Gothic; Huxley's Evolution and Ethics; Herbert Spencer's Essays on Education. Fifth Year Arts, Honors, Second Term. Two hours a week.

- 21. THE HISTORY OF CRITICISM IN ENGLAND, 1660-1798. Dryden's Essay of Dramatic Poesy; Addison's Account of the Greatest English Poets, Essays on Chevy Chase, Paradise Lost, (Spectator, Nos. 70, 74, 267, 273, 279, 285, 592, 595); Pope's Essay on Criticism, Preface to Shakespeare; Johnson's Preface to Shakespeare, Lives of Cowley, Waller, Dryden, Pope, Thomson, Goldsmith, The Present State of Polite Learning in Europe; Richardson's Essays on Some of Shakespeare's Dramatic Characters; Morgann's Essay on the Dramatic Character of Sir John Falstaffe; also prescribed readings from Temple, Rymer, Davenant, Hurd, Young and Walpole. Fifth Year Arts, Honors, First Term. Two hours a week.
- 22. The History of Criticism in England, 1798-1840. Wordsworth's Preface and Appendices to Lyrical Ballads; Coleridge's Biographia Literaria, chapters XIV-XXII; Byron's English Bards and Scotch Reviewers, A Vision of Judgment, Don Juan (Dedicatory stanzas), Letters on the Campbell-Bowles controversy (Byron's Letters and Journals, edited by E. H. Coleridge, Vol. V, Appendix III); Hazlitt's Lectures on the English Poets, Essays on Wordsworth, Scott, Coleridge, Jeffrey, In the Spirit of the Age, On Paradox and Commonplace (Table Talk); Shelley's Defence of Poetry, Preface to The Revolt of Islam; De Quincey's On the Knocking at the Gate in "Macbeth," The Poetry of Pope, On Wordsworth's Poetry; also selections from Jeffrey, Southey, Lamb, Keats, Bowles, Campbell, Carlyle and Macaulay as prescribed. Fifth Year Arts, Honors, Second Term. Two hours a week.

Note—Intending students of Courses 21 and 22 are advised to consult the instructor before the close of the session concerning their reading during the summer vacation.

23. ADVANCED OLD ENGLISH. (a) Beowulf, edited by F. Klaeber (Heath). (b) A knowledge of Old English Literature from the following: Translations from Old English Prose, by Cook and Tinker (Ginn); Old English Poems, by Faust and Thompson (Scott, Foresman); Old English Poetry, translated by Spaeth (Princeton University).

References: English Literature before Chaucer, Part I, by P. G. Thomas (Edward Arnold); English Literature from the Beginning to the Norman Conquest, by Stopford A. Brooke (Macmillan); An Old English Grammar, by Sievers-Cook (Ginn); Beowulf and Epic traditions by W. W. Lawrence (Harvard University Press); Translations of Beowulf in The Oldest English Epic, by F. B. Gummere (Macmillan). Fifth Year Arts, Honors, First Term. Two hours a week.

24. HISTORICAL ENGLISH GRAMMAR. (a) An elementary study of Gothic and Germanic Philology. Text: Grammar of the Gothic Language,

by Joseph Wright (Oxford). (b) A survey of the growth of the English Language, including such topics as: The origin and nature of language; chief language types and families; the place of English in the Indo-European system; history of English inflections, syntax, vocabulary, and phonology; semantics and lexicography.

Texts: History of the English Language, by O. F. Emerson (Macmillan); Growth and Structure of the English Language, by Otto Jespersen (Stechert, New York).

References: Modern English, Its Growth and Present Use, by G. R. Krapp (Scribners); Words and Their Ways in English Speech, by Greenough and Kittredge (Macmillan); A Short History of English, by H. C. Wyld (Dutton). Fifth Year Arts, Honors, Second Term. Two hours a week.

#### DEPARTMENT OF FRENCH

W. F. Osborne, M.A., Officier d'Académie	Professor
C. Meredith Jones, M.A. Assistant	Professor
Céline A. Ballu, M.A.	_Lecturer
M. E. Richard, B.A.	_Lecturer

FRENCH I-Courses 1, 2, 3, 4. (Prerequisite, Matriculation French.)

FRENCH II-Courses 5, 6, 7, 8. (Prerequisite, French I.)

FRENCH III—Courses 9, 10, 11, 12. (Prerequisite, French II.)

French IV—Courses 13, 14, 15, 16 (Prerequisite, French III.)

French IV G—Courses 13, 14, 15, 16, 17, 18, 19, 20. (Prerequisite, French III.)

French IV H—Courses 13, 14, 15, 16, 17, 18, 19, 20. (Prerequisite, French III.)

French V—Courses 19, 20, 21, 22, 23, 24, 25, 26, 27, 28. (Prerequisite, French IV H.)

N.B.-For key to system of numbering courses, see page 4.

1, 2. Grammar and Composition. Text: Beginners' French Grammar, Olmsted and Sirich (Holt).

First Term—Lessons XV-XXXV, together with proportionate part of Verb Review.

Second Term-Lessons XXXVI-LV, Verb Review completed.

Some time will be given in each term to the translation of passages of continuous prose.

3, 4. AUTHORS. First Term—Jean Christophe, Vol. I, L'Aube, by Romain Rolland, ed. by H. W. Church, pub. by Holt and Co. Second Term—Colomba, by Prosper Mérimée, ed. by R. L. Hawkins, pub. by Holt and Co.

- 5, 6. Practice and Composition. Text: French Composition and Pronunciation Exercises, Dubrule and Mauser (Ginn and Co.) First Term—First Six Lessons in Composition, together with proportionate part of the Exercices de Prononciation. Second Term—Remaining Lessons in Composition, together with similarly proportionate part of the Exercices de Prononciation. A limited portion of time will be given in this term to practical exercises based on Le Voyage de M. Perrichon by Labiche et Martin (J. M. Dent and Sons).
- 7, 8. AUTHORS. First Term—Chateaubriand, Atala (ed. by Kuhns, pub. by Heath); Balzac, Le Colonel Chabert (ed. by S. H. Moore, pub. by Cambridge University Press). Second Term—Anatole France, Le Livre de Mon Ami (ed. by Guerlac, pub. by Holt); Corneille, Le Cid (ed. by Nitze and Galpin, pub. by Holt).
- 9, 10. EXPLICATION DE TEXTES ET COMPOSITION. Methods of analysis, oral and written, will be developed by the use of V. Bouillot, Morceaux Choisis (Garçons—Classe de 6e; J. Filles—1re Année Secondaire). First Term—Any twelve lessons drawn from Chapters I and II. Second Term—Any twelve lessons drawn from Chapters III and IV. With the work in Bouillot in the Second Term will be associated for purposes of composition and discussion Maria Chapdelaine, par Louis Hémon, ed. by H. P. Thieme, and pub. by The Macmillan Co.
- 11, 12. SEVENTEENTH AND EIGHTEENTH CENTURIES. First Term—Corneille, Le Cid, ed. by Warren, pub. by Heath; Racine, Androniaque, ed. by Wells, pub. by Heath; Molière, Les Précieuses Ridicules, ed. by Toy, pub. by Heath (this text is intended for private preparation by the student, and not for class treatment); and Le Misanthrope, ed. by Eggert, and pub. by Heath. Second Term—La Bruyère, pages 54 to 88, in edition of Warren, published by Heath; Montesquieu, Lettres Persanes, pp. 1-62, edited by Pellissier, published by MacMillan Co. of Canada; Marivaux, Le Jeu de l'Amour et du Hasard, edited by Fortier, published by Heath; Diderot, Selections from, edited by Giese, published by Heath; Beaumarchais, Le Barbier de Séville, edited by Spiers, published by Heath.
- 13, 14. EXPLICATION DE TEXTES ET COMPOSITION. First Term—Eugène Fromentin, Dominique, published by Nelson. Second Term—Paul Bourget, Voyageuses, published by Nelson. Methods of analysis initiated and developed in the Third Year will here be used in a French treatment of these texts with a view to promoting practical command of French, both oral and written. The texts above indicated may be supplemented at the discretion of the Instructor by a limited use of poems drawn from Henning, French Lyrics of the Nineteenth Century.
- 15, 16. NINETEENTH CENTURY LITERATURE. First Term—Rousseau, Discours sur l'origine et les fondements de l'inégalité parmi les hommes, edited by Muller and Vaillant (Oxford); Bernardin de Saint-Pierre, Paul et Virginie, edited by Kuhns (Holt); Chateaubriand, Atala, edited by Kuhns (Heath); Vigny, Cinqmars, edited by Sankey (Heath); Hugo, Préface de Cromwell, Hernani, edited by Effinger (Scott, Foresman); Vigny, Chatterton, edited by Lauvrière (Clarendon Press); Henning, French Lyrics of the Nineteenth Century (Ginn). Second Term—Musset, Carmosine, in series of Cambridge Plain Texts (Cambridge University Press); Balzac, Eugéne Grandet, edited by Jenkins (Holt); Stendhal, Waterloo, edited by Hartog (Rivington);

Dow and Skinner, Quelques contes des romanciers naturalistes (Heath); Pailleron, Le monde ou l'on s'ennuie, edited by Price (Ginn); Becque, Les Corbeaux, edited by Dawson (Heath); Rostand, Cyrano de Bergerac, edited by Kuhns (Holt); Henning, French Lyrics of the Nineteenth Century (Ginn).

- 17, 18. CONTEMPORARY FRENCH LITERATURE.
- 19, 20. French Prose Composition, English into French. Text: A Manual of French Composition, edited by Ritchie and Moore, and published by the Cambridge University Press.
- 21, 22. The Literature of the French Renaissance. Calvin, Pages Choisies, edited by Daniel Jordan (Heath). Selections from—Marot; Joachim du Bellay; Brantôme; D'Aubigné; in Darmesteter et Hatzfeldt, Le Seizième Siècle en France (Delagrave). Du Bellay, La Défense et Illustration de la Langue Française, edited by Séché (Sansot). Ronsard, edition by P. Villey (Bibliothèque Française, Plon). Amyot, Démosthènes et Cicéron (Démosthènes only, to be studied), edited by L. Normand (Hachette). Brantôme, Vies des Dames Illustres, Discours sur Anne de Bretagne only, (Classiques Garnier). Satyre Ménippée (Classiques Garnier). Rabelais, edition by Huguet (Pages Choisies des Grands Ecrivians, Armand Colin). Montaigne, edition by P. Villey (Bibliothèque Française, Plon).
- 23. Non-Dramatic Literature of the Seventeenth Century. Pascal, extracts from Les Pensées in Selections from Pascal, edited by Warren and published by Heath; Bossuet, Oraisons Funèbres de Henriette de France, de Henriette d'Angleterre, et du Grande Condé, in Selections from Bossuet edited by Warren and published by Heath; Selected Letters of Madame de Sévigné, edited by A. T. Baker and published by Manchester University Press; Madame de la Fayette, La Princesse de Clèves, edited by H. Ashton and published by the Cambridge University Press; La Bruyère, the Sections of Les Caractères, entitled Du Mérite Personnel, des Femmes, et de la Cour, in the Collection Nelson. Reference book to be in hands of students for this course; Lanson, Histoire de la Littérature française, Hachette et Cie, Paris.
- 24. EIGHTEENTH CENTURY COMEDY. Jean François Regnard, Le Joueur and Le Légataire Universel in la Collection Nelson; Lesage, Turcaret, edition by Kerr, published by Heath; Marivaux, Le Jeu de l'Amour et du Hasard, edited by Fortier, published by Heath; Sedaine, Le Philosophe sans le savoir, edited by Oliver and published by Oxford University Press; Beaumarchais, Le Barbier de Séville, edited by W. G. Hartog, published by Blackie and Son; and Le Mariage de Figaro, edited by E. F. Langley, published by Oxford University Press. Lanson, Histoire de la Littérature française, as in Course 23.
- 25, 26. OLD FRENCH. L. Constans, Chrestomathie de l'ancien français (Stechert); Le Mystère d'Adam, edited by Paul Studer (Manchester University Press); Aucassin et Nicolette, edited by F. W. Bourdillon (Manchester University Press); Béroul, Le Roman de Tristan, edited by Ernest Muret in Les Classiques français du Moyen Age (Champion).
- 27, 28. EVOLUTION HISTORIQUE DE LA FRANCE DES ORIGINES à NOS JOURS. Texts: Alfred Rambaud, L'Histoire de la Civilisation française, 2 vols., Librairie Armand Colin, Paris. This course is conducted in French, and will be open to M.A. and other approved students.

# DEPARTMENT OF GEOLOGY AND MINERALOGY

Justin S. DeLury, B.A., Ph.D., F.R.S.C.

S. Raeburn Kirk, B.Sc., Ph.D.

\*George M. Brownell, M.Sc., Ph.D.

Assistant Professor

Assistant Professor

GEOLOGY II—Courses 1, 2; 1a, 2a.

GEOLOGY III—Courses 7, 8; 11; 11a; 12, 12a. (Prerequisite, Geology II and Chemistry I.)

GEOLOGY IV—Courses 19, 19a; 20, 20a. (Prerequisite, Geology III.)

Geology IV H—Courses 15, 15a; 16, 16a; 19, 19a; 20, 20a. (Prerequisite, Geology III, Physics I.)

GEOLOGY V—Courses 31, 31a; 32, 32a and either 23, 23a; 24, 24a or 27, 27a; 28, 28a. (Prerequisite, Geology IV H.)

THIRD YEAR CIVIL ENGINEERING—Courses 5, 5a; 6, 6a.

FIRST YEAR PHARMARY—Course 10.

Students intending to enter courses in Geology in the Senior Honors Division in Science are advised to consult pages 39-40 for guidance as to choice of subjects in the Junior Division and in the First Year of the Senior Division.

- 1, 2. General Geology. The materials of the earth. Geological agents and structures. Ore deposits. Fossils and their meaning. Origin and age of the earth. Historical geology. Evolution of plant and animal life. Coleman and Parks' Elementary Geology. Two hours a week.
- 1a, 2a. Practical Demonstrations. On minerals, rocks and fossils. Study of topographical and geological charts and maps. One hour a week.
- 5, 6. Engineering Geology. Similar in scope to Course 1, 2, but with particular application to engineering problems. Ries and Watson; Elements of Engineering Geology. Two hours a week.
- 5a, 6a. Engineering Geology, Practical. Identification of common minerals and rocks from hand specimens. Brief study of fossils. Study of physiographic features from topographical maps and the interpretation of geological maps. Two hours a week.
- 7, 8. Practical Geology. Systematic examination of minerals by blowpipe and dry way tests. Geological maps and structure sections. Panorama of Physiographic Types: Lobeck. Three hours a week.
- 10. ELEMENTARY MINERALOGY. Minerals, their properties, origin and associations. Two hours a week.
- 11. CRYSTALLOGRAPHY. Laws of crystallography. Stereographic projection. Systems and classes. Optical properties. Dana: Text book of Mineralogy. Two hours a week.

11a. PRACTICAL CRYSTALLOGRAPHY. Study of crystal forms. Two hours a week.

<sup>\*</sup>Absent on leave 1932-33.

- 12. MINERALOGY. Classification and systematic study of minerals. Genetic relationships. Dana: Text book of Mineralogy. Two hours a week.
- 12a. PRACTICAL MINERALOGY. Study and identification of mineral specimens in the laboratory. Two hours a week.
- 15, 16. Petrology. Optical properties of rock-forming minerals under the polarizing microscope. Classification of rocks. The characteristics of the various rock families. Magmatic differentiation. Physicochemical laws governing the formation of igneous, metamorphic and sedimentary rocks. Tyrrell: Principles of Petrology. Two hours a week.
- 15a, 16a. Practical Petrology. Identification of rock-forming minerals under the microscope. Study and identification of rocks in thin sections and in hand specimens. Quantitative estimation of rocks. Five hours a week.
- 19. PALAEONTOLOGY. The nature of fossils. Study of representative fossil invertebrates with emphasis on stratigraphical rather than on biological characters. Fossil vertebrates and plants in brief outline. Three hours a week.
- 19a. Practical Palaeontology. Laboratory study of fossils. Three hours a week.
- 20. Economic Geology. Non-metallic mineral deposits, mineral fuels, clays, etc. Bayley, Non-Metallic Mineral Deposits. Three hours a week.
- 20a. PRACTICAL ECONOMIC GEOLOGY. Study of economic products dealt with in the Lecture Course 20. Classification and study of rocks. Three hours a week.
- 23, 24. ADVANCED ECONOMIC GEOLOGY. An exhaustive study of the genesis and mineralogy of ore deposits. The structural geology and petrography of the great mining districts of the world. Emmons: Principles of Economic Geology. Two hours a week.
- 23a, 24a. Practical Advanced Economic Geology. Study of ore suites and rock formations of some important ore deposits. Identification of opaque ore minerals under the microscope with a study of the paragenesis and structures of the typical ores. Short: Microscopic Determination of the Ore Minerals. Six hours a week.
- 27, 28. ADVANCED INVERTEBRATE PALAEONTOLOGY. Systematic study of fossil invertebrates; more comprehensive than in Course 19, involving greater taxonomic detail and phylogenetic considerations. Zittel: Text book of Palaeontology, Vol. I. Two hours a week.
- 27a, 28a. PRACTICAL ADVANCED PALAEONTOLOGY. Study of representative collections of North American fossils and use of the palaeontological literature of Canada and the United States in determination of species. Six hours a week.
- 31, 32. STRATIGRAPHY. (a) Principles: Including a study of processes, environments and products of sedimentation, structural characters and relations of sedimentary rocks, evidence obtained from fossils, classification and correlation of geological formations and palaeogeography. (b) Strati-

graphy of North America: The physical and faunal history of the different geological periods. Two hours a week.

- 31a, 32a. PRACTICAL STRATIGRAPHY. Problems on stratigraphical principles involving independent use of geological literature. Chronological interpretation of geological maps. Study of faunas and floras of the geological periods dealt with in the lecture course 31, 32. Six hours a week.
- 35, 36. ADVANCED INVESTIGATIONS AND RESEARCH. Students in the M.A. and M.Sc. courses, and the more advanced students in the fifth year of the Honors B.Sc. course, will carry out, under direction, independent investigation on some field or laboratory problem. The laboratories are open all day for this purpose.
- 37, 38. Geological Excursions. During October, the earlier part of November, and the latter part of March, excursions will be conducted on Saturdays to places of geological interest in the neighborhood of Winnipeg. These excursions form an integral part of the class work.
- 43, 44. Graduate Courses. Special courses on advanced topics will be arranged for Graduate Students from year to year as the occasion demands.

Students who intend to read Geology as an Honors subjects should, if possible, spend their summers as student assistants under the Geological Survey of Canada.

#### Additional Text Books Recommended

Text Book of Geology, Pirsson and Schuchert; Geology, Chamberlin and Salisbury; Hand Book of Minerals, Butler; Determinative Mineralogy, Brush and Penfield; Palaeontology, Woods; Mineral Deposits, Lindgren; Economic Geology, Ries; Metamorphic Geology, Leith and Mead; Manual of Petrographic Methods, Johannsen; Determination of Rock Forming Minerals, Johannsen; Quantitative Classification of Igneous Rocks, Cross, Iddings, Pirsson and Washington; Introduction to the Study of Fossils, Shimer; Sedimentary Petrography, Milner; Principles of Stratigraphy, Grabau; Treatise on Sendimentation, Twenhofel; Interpretation of Topographic and Geologic Maps, Dake and Brown.

#### DEPARTMENT OF GERMAN

J. H. Heinzelmann, B.A., Ph.D. Professor
W. F. Mainland, M.A. Assistant Professor

GERMAN IA-Courses 1, 2.

GERMAN I—Courses 3, 4. (Prerequisite, Matriculation German or German IA.)

GERMAN IIA—Courses 5, 6. (Prerequisite, German IA.)

GERMAN II-Courses 7, 8. (Prerequisite, German I.)

GERMAN III-Courses 9. 10; 11, 12. (Prerequisite, German II.)

GERMAN IV—Courses 13, 14, with additional reading. (Prerequisite, German III.)

1, 2. ELEMENTARY GERMAN. This course is offered for those entering the University without German.

First Term—Heffner, Brief German Grammar (Heath), pp. 1-71 Zeydel, An Elementary German Reader (Crofts), Selections 1-20.

Second Term—Heffner, Brief German Grammar, completed; An Elementary German Reader, completed, omitting Nos. 32, 33, 35, 36, 39 and 55.

3, 4. GERMAN AUTHORS AND PRACTICE.

First Term—Zeydel, A First Course in Written and Spoken German (Crofts), Lessons I-XV. Hillern, Höher als die Kirche (Copp Clark); Wilhelmi, Einer muss Heiraten and Benedix, Eigensinn, bound together (Holt), the first comedy. Lieder, German Poems and Songs (Oxford Press), Nos. 1-23. Nos. 1, 2, 3, 6, 8, 13, 18 are to be memorized. Omit Nos. 7, 12 and 16.

Second Term—A First Course in Written and Spoken German, completed Frommel, Mit Ränzel und Wanderstab (Copp Clark); Benedix Eigensinn; German Poems and Songs, Nos. 25-50. Nos. 32, 33, 35, 37, 46 are to be memorized. Omit Nos. 30 and 45.

5, 6. German Prose Readings. This course is intended primarily for those in Second Year Arts and Science intending to go forward to the course in Medicine.

First Term—Diamond and Uhlendorff, Mitten im Leben (Holt), Selections 1-6; Kyp, A Scientific German Reader (Oxford Press), pp. 3-35 and pp. 125-141.

Second Term—Mitten im Leben, Selections 7-14, omitting No. 12; Kyp. A Scientific German Reader, pp. 62-124 and 218-241.

7, 8. ADVANCED AUTHORS AND PRACTICE.

First Term—Pope, Simple Writing and Speaking German (Holt), pp. 1-41; Eyth, Der blinde Passagier (Oxford Press); In St. Jürgen (Ginn).

Second Term—Pope, Simple Writing and Speaking German, Part I completed; Thiess, Abschied vom Paradies (Copp Clark); Seidel, Leberecht Hühnchen (Copp Clark).

- 9. HISTORY OF GERMAN LITERATURE IN THE EIGHTEENTH CENTURY AND LESSING. For intensive reading the student should procure Lessing's Minna von Barnhelm (Holt) and Emilia Galotti (Copp Clark). Supplementary reading and German themes.
- 10. Schiller and Goethe. A study of their literary development. For detailed study the student should procure Schiller's Wilhelm Tell (Holt) and Goethe's Faust, Part I (Copp Clark). Supplementary reading and German themes.

- 11, 12. Composition. Whitney and Stroebe, Easy German Composition (Holt), Nos. 1-30
- 13. THE CLASSICAL PERIOD. Lectures, representative readings and reports.
- 14. THE MODERN GERMAN DRAMA. Lectures in German on the development of the German Drama in the Nineteenth Century, with a study of the more important masterpieces.
- 15. GERMAN LITERATURE SINCE 1880. A study of German literary developments during the last fifty years with selected readings from the period. Not offered in the year 1933-34.
  - 16. GERMAN ROMANTICISM. Not offered in the year 1933-34.
  - 17. THE MODERN GERMAN NOVEL. Not offered in the year 1933-34.

# DEPARTMENT OF HISTORY

H. N. Fieldhouse, M.A.	Professor
J E. Howe, M.A. Assistant	Professor
R. O. MacFarlane, M.A., Ph.D. Assistant	Professor

HISTORY I-Courses 1, 2.

HISTORY II—Courses 3, 4.

HISTORY III—Courses 5a, 5b, 6. (Prerequisite History II.)

HISTORY IV—Courses 7, 8. (Prerequisite History III.)

HISTORY IVG—Courses 7, 8, and either 9a, 9b, or 10. (Prerequisite History III.)

HISTORY IVH—Courses 7, 8, and either 9a, 9b, or 10. (Prerequisite History III.)

HISTORY V—Courses 11, 12, and either 13, 14, or 15, 16. (Prerequisite History IVH.)

N.B.—For key to system of numbering courses, see page 4.

Students are advised that emphasis will be laid on the preparation of essays or other term work as prescribed by the tutor. A knowledge of the necessary historical geography will be expected in all courses, so that students are advised to supply themselves with an historical atlas, such as that by W. R. Shepherd, *Historical Atlas* (Henry Holt, New York).

- 1. MEDLEVAL EUROPEAN HISTORY. The history of Europe from the fall of the Western Roman Empire to the outbreak of the French Wars in Italy in 1494. Text book: Munro and Sontag, *The Middle Ages* (Century Co.).
- 2. Modern European History. The history of Europe from the Renaissance to the French Revolution. Text book: Gillespie, A History of Europe, 1500-1815 (Norton & Co.).
  - 3, 4. Europe Since 1789. Text books: Madelin, The French Revolu-

tion, and either Marriott, History of Europe 1815-1923 (Methuen) or Grant and Temperley, Europe in the Nineteenth Century (Longmans). Other reading will be prescribed as the course proceeds.

- 5a. GENERAL CANADIAN HISTORY TO 1783. Emphasis will be laid upon the following topics: geography, the European background, early discovery and exploration, the trading companies, royal government and settlement, Frontenac and western expansion, social and economic conditions in the eighteenth century, Anglo-French rivalry, Quebec acts, American Revolution. Students are advised to consult Burpee, An Historical Atlas of Canada; Trotter, Canadian History, A Syllabus and Guide to Reading; and Lucas, Historical Geography of Canada, Part I. General reading: Parkman, Works; Canada and its Provinces; Makers of Canada; Chronicles of Canada; Cambridge History of the British Empire, Vol. 6.
- 5b. AMERICAN HISTORY. This course will trace the rise and development of the American nation. Text book: Harlow, Growth of the United States (Holt). The following are the more important topics: The making of the constitution, Jeffersonian and Jacksonian democracy, the struggle over State rights, slavery and the Civil War, westward expansion, industrial expansion, the tariff and immigration, American imperialism.
- 6. General Canadian History since 1783. The following topics will be emphasised: the coming of the Loyalists, relations with the U.S.A., representative and responsible government, immigration and settlement, the era of the canals and the railways, confederation, development of the political parties, rise of the West, growth of the Dominion, Canada in the Commonwealth of Nations. All students will require a copy of Kennedy, Constitution of Canada. General reading and atlas as for Course 5a. Further reading will be prescribed as the course proceeds.
- 7. British History, Medleval. This course will be primarily a study of constitutional development prior to 1485, but will assume a working knowledge of the political background. It will include the following topics: Celtic and Roman influences, the institutions of the Anglo-Saxons, the Norman conquest, feudalism, the administrative and judicial reforms of the Norman and Angevin kings, Magna Carta, the baronial opposition, the evolution of parliament, the struggle between the Council and the Household, the Lancastrian experiment and its failure. Students will be expected to provide themselves with Lunt, History of England (Harper & Bros.); Adams, Constitutional History of England (Cape); and the selection of documents prepared for use in this course and obtainable from the University Book Department.
- 8. British History, Modern. The main emphasis in the course will be placed upon the following topics: the Tudor monarchy and conciliar government, the growth of Protestantism and its effect upon the relations of Church and State, the struggle for sovereignty between Crown and Parliament, the constitutional outcome of the Revolution and Hanoverian Succession, and the development of cabinet and parliamentary government. Text book recommended: G. B. Adams, Constitutional History of England. Other reading will be prescribed as the course proceeds.

- 9a. BRITISH IMPERIAL HISTORY TO 1783. This course will be a study of the rise and fall of the First British Empire. Particular attention will be paid to the following topics: the commercial background of overseas expansion, the founding of an overseas empire, the Old Colonial System, the development of the overseas empire, the American Revolution. Williamson, A Short History of British Expansion, will serve as a narrative outline for the course.
- 9b. British Imperial History since 1783. Particular attention will be paid to the following topics: the founding of the Second British Empire, the end of the Old Colonial System, British policy in India, the evolution of the self-governing dominions, tropical colonisation, later nineteenth century imperialism, the Commonwealth of Nations. Williamson, A Short History of British Expansion, Vol. 2, will serve as a narrative outline for the course.
- 10. THE HISTORY OF ENGLISH POLITICAL LITERATURE. A survey of English political thought with the object of complementing the accompanying course in British History and of showing the influence of political thought upon constitutional development from the Middle Ages to the present. The volumes on political thought in the Home University Library Series by Gooch, Laski, Davidson, and Barker, will serve as an outline, and Gettell's, History of Political Thought (Century Co.), will be referred to particularly for bibliography.
- 11, 12. TOPICS IN CANADIAN HISTORY. This course will attempt to introduce students to certain primary materials of Canadian history and to give them a first acquaintance with methods of research. Scope of first term: a documentary study of the Canadian Constitution. Scope of second term: Canada since Confederation.
- 13, 14. THE FRENCH REVOLUTION. This course will enable students to use some of the primary materials of European history, as an introduction to methods of research in this field.
- 15, 16. The Concert of Europe. A detailed study of the settlement of Europe after the Napoleonic Wars, and of the experiment in the maintenance of international public order. Texts: Hertslet, Map of Europe by Treaty; Webster, British Diplomacy; Gentz, Dépêches inédites aux Hospodars de Valachie; Talleyrand, Mémoires; Metternich, Mémoires; Wellington, Dispatches. Reference will be made to Satow, Diplomatic Practice; Phillips, Confederation of Europe; and to more specialized works as the course proceeds.

# DEPARTMENT OF MATHEMATICS AND ASTRONOMY

Norman R. Wilson, M.A., Ph.D., F.R.S.C.	Professor
Lloyd A. H. Warren, M.A., Ph.D., F.R.A.S., A.A.I.A.,	
A.A.S., F.C.A.S.	Professor
William Tier, M.A.	_Professor
T. H. Milne, M.A. Assistant	Professor
J. William Lawson, M.A.	Lecturer

Mathematics I—Courses 1, 3 (one paper); 2, 4 (one paper). (Prerequisite, Matriculation Mathematics.)

MATHEMATICS IA—Courses 5, 6. (May be taken with Drawing I.)

MATHEMATICS II—Courses 13, 14, 15, 16. (Prerequisite, Mathematics I.) MATHEMATICS IIA—Courses 5, 6.

MATHEMATICS III—Courses 17, 18, 29, 30. (Prerequisite for 29, 30, Mathematics II.)

MATHEMATICS IIIA—Courses 73, 74 (to be elected with English IIIA or a two-unit subject of the Junior Division).

MATHEMATICS IIIS—Courses 29, 30, 55, 56 or 25, 26. (Prerequisite, Mathematics II.)

MATHEMATICS IV—A selection of four courses from the following: 25, 37, 39, 40, 43, 44, 46, 47, and, for students proceeding to the B.Sc. degree, 55, and 56.

MATHEMATICS IVG—A selection of four courses (as above in Mathematics IV), from the following: 25, 37, 39, 40, 43, 44, 46, 47; together with Courses 49, 50, 55, 56.

MATHEMATICS IVH AND V—The four courses given under Mathematics IV; Courses 27, 28, 38, 54, 55, or Courses 49, 50, 55, 56, in alternate years. (The former in 1933-1934.)

APPLIED MATHEMATICS IVA—Courses 75, 76, 77, 78, or a selection made by the Department from courses available.

APPLIED MATHEMATICS V—Courses 79, 80.

PHARMACY I—(Degree Course)—Courses 1, 2, 3, 4.

ARCHITECTURE I-Courses 1, 2, 3, 4, 5, 6.

ARCHITECTURE II—Courses 19, 52.

Engineering I—Courses 9, 10, 19, 20, 52, 93.

Engineering II—Courses 21, 22, 89.

CIVIL ENGINEERING III—Courses 54, 96.

ELECTRICAL ENGINEERING III—Courses 54, 96.

ELECTRICAL ENGINEERING III—Course 23.

ASTRONOMY II-Courses 91, 92.

ASTRONOMY III-Courses 89, 93, 54, 96.

Students intending to specialize in Pure Mathematics are advised to combine it with Physics in all years; and, so far as possible, Astronomy and Chemistry. Students intending to specialize in Financial Mathematics are

advised to combine it with Economics. Students intending to enter courses in Mathematics in the Senior Honors Division in Science are advised to consult page 39 for guidance as to choice of subjects in the Junion Division and in the First Year of the Senior Division. Students are advised against taking Mathematics II unless they take concurrently or have taken Trigonometry (Mathematics IA or IIA).

N.B.-For key to system of numbering courses, see page 4.

#### PURE MATHEMATICS

- \*1, 2. ALGEBRA. Text: An Intermediate Algebra by Wilson and Warren (Oxford University Press). Two hours per week.
- 3, 4. ANALYTIC GEOMETRY. Text: Analytic Geometry by Crawley and Evans (University of Pennsylvania, Philadelphia). Two hours per week. First Term—Chapters I, III.

Second Term-Chapters IV, V (omitting sections 59, 60 and 61).

5, 6. TRIGONOMETRY. Text: Hall and Knight (Canadian Edition), Castle, Four Figure Tables (Macmillan). Two hours per week.

First Term-Chapters I-VIII, XI.

Second Term-Chapters IX, X, XIII-XV (pp.204-218), XVII, XVIII.

- 9, 10. ALGEBRA. Text: Wilson and Warren, Intermediate Algebra. Two hours per week, for students in Engineering. Theory of quadratics, complex numbers, limits, convergence of series, exponential and logarithmic series, logarithm, hyperbolic functions, solution of numerical equations including transcendental equations, theory of equation, partial fractions, computation with approximate numbers.
- 13, 14. Analytic Geometry. Text: Crawley and Evans. Two hours per week for students in Arts and Science.

First Term—Chapter III, secs. 29, 32; Chapter V, secs. 60, 61, 57, Chapters VI, VII.

Second Term--Chapters VIII, IX (omitting secs. 96, 99, 100, but including hypocycloid of four cusps), X, XII to p. 224 (omitting secs. 116, 117).

15, 16. CALCULUS. Text: Calculus for Beginners, by W. M. Baker (G. Bell & Sons, London). Two hours per week, for students in Arts and Science.

First Term-To page 54.

Second Term-Pages 55 to 105, inclusive.

17, 18. ALGEBRA. Text: Wilson and Warren, Intermediate Algebra. Two hours per week, for students in Arts and Science.

First Term—Chapters V, XI, XII, XIII.

Second Term—Chapters XVI, XVII, XVIII (omitting sec. 140), XXI (omitting sec. 163).

<sup>\*</sup>Students preparing for Engineering or the special courses in Mathematics are advised to procure the complete edition of this text book.

- 19. Analytic Geometry. Text: Crawley and Evans. Three hours per week, for students in Engineering. From page 107, selected sections.
- 20, 21, 22. CALCULUS. An elementary course with practical applications. Differentiation, measurement of rates, motion in curved paths, maxima and minima, partial derivatives, tangents and normals, curvature, evolutes, expansions, formation of differential equations, integration, areas and lengths of curves, volumes and surfaces, multiple integrals, centres of gravity, moments of inertia. First Year: Two hours per week. Second Year: Three hours per week; for students in Engineering.
- 23. DIFFERENTIAL EQUATIONS. Text: Hodgson, Applied Mathematics for Engineers, Vol. III, Chapters I, IV, VI, VIII. Two hours per week, for Engineering students. A selected course, specially adapted to the needs of engineers.
- 25. DETERMINANTS AND THEORY OF EQUATIONS. A continuation of courses 9, 10. Texts: Wilson and Warren, Intermediate Algebra, Chapter XI; Dickson, First Course in the Theory of Equations, Chapters I to VIII; for reference, Burnside and Panton, Theory of Equations. Two hours per week; for students in Arts and Science. (Given biennially; given in 1933-34.)
- 27. ALGEBRA. Texts: Wilson and Warren, Intermediate Algebra; Hall and Knight, Higher Algebra. Scales of notation, symmetric functions, continued fractions, indeterminate equations, convergence of series and products, summation of series, elementary theory of numbers. Two hours per week, for Honors students in Arts and Science. (Given biennially; given in 1933-34.)
- 28. TRIGONOMETRY. Texts: Todhunter and Hogg, Plane Trigonometry; Todhunter and Leathem, Spherical Trigonometry. Plane Trigonometry—Inverse ratios and general solution of equations, evaluation of  $\pi$ , exponentials, multiple angle formulae, factoring, summation of series, factor form of sine and cosine. Spherical Trigonometry—Formulae connecting sides and angles, Napier's rules, solution of triangles, inscribed circles, etc., areas. One hour per week; for students in Science and Honors students in Arts. (To be combined with 54; given biennially; given in 1933-34.)
- 29, 30. DIFFERENTIAL AND INTEGRAL CALCULUS. A continuation of courses 15, 16. Two hours per week; for students in Arts and Science.
- 37. ADVANCED CALCULUS. A countinuation of courses 29, 30. Two hours per week; for students in Arts and Science. (Given biennially; given in 1933-34.)
- 38. ADVANCED CALCULUS. A continuation of course 37. Two hours per week; for Honors students in Arts and Science. (Given biennially; given in 1933-34.)
- 39. DIFFERENTIAL EQUATIONS. Text: Piaggio, Chapters I-III, V. Two hours per week; for students in Arts and Science. (Given biennially; not given in 1933-34.)
- 40. DIFFERENTIAL EQUATIONS. Text: Piaggio. Two hours per week; for Honors students in Arts and Science. (Given biennially; not given in 1933-34.)

- 43, 44. SOLID GEOMETRY. Texts: Hall and Stevens, Geometry, Part VI, and Snyder and Sisam, Analytic Geometry of Space. Two hours per week; for students in Arts and Science. (Given biennially; not given in 1933-34.)
- 46. PROJECTIVE GEOMETRY. Text: Smart. Two hours per week; for students in Arts and Science. (Given biennially; given in 1933-34.)
- 47. VECTOR ANALYSIS. Text: Coffin. The elements of vector analysis with application to mechanics and geometry. Two hours per week; for students in Arts and Science. (Given biennially; given in 1933-34.)
- 49, 50. Functions of a Complex Variable. An elementary course. Two hours per week; for Honors students in Arts and Science. (Given biennially; not given in 1933-34.)

#### APPLIED MATHEMATICS

- 52. Solid Geometry and Mensuration. Text: To be announced. Mensuration of plane figures, including parallelogram, triangle, circle, ellipse, sectors and segments, areas of irregular figures by trapezoidal, midordinate, Simpson's and Dufton's rules. Basic Theorems on planes and lines, projection, trihedral angles. Mensuration of parallelopiped, prism, pyramid, and their frusta, cylinders, cones and their frusta, spheres and their sectors, segments and zones, ungulae of cylinders and cones, prismoidal formulae and irregular volumes, applications to excavations and fills. Two hours per week; for Engineering students.
- 54. THE THEORY OF ERRORS AND METHOD OF LEAST SQUARES. (To be combined with 28.) The general principles of probability, the law of error, direct measurements of equal and different weights, mean square and probable errors, indirect measurements; conditioned observations; applications to empirical constants and formulae. One hour per week; for students in Science and Honors students in Arts.
- 55, 56. ANALYTIC MECHANICS (STATICS). Text: Campbell. Analytic Mechanics, Chapters VI, VIII, XI, XIII, XV, XVI, with additional lectures on attraction. Two hours per week; for students in Science and Honors students in Arts. (Given biennially; given in 1933-34.)
- 57, 58. ANALYTIC MECHANICS (DYNAMICS). Text: Campbell, Analytic Mechanics, Chapters I, V, IX, X, XII, XIV, XVII, with additional lectures on central forces. Two hours per week; for students in Science and Honors Students in Arts. (Given biennially; not given in 1933-34.)
- 61, 62. CELESTIAL MECHANICS. Central orbits, derivation of Newton's law; determination of the orbit from the law of force; potential and attraction of bodies; the problem of two bodies; the problem of n bodies; the problem of three bodies; Lagrangian straight line and equilateral triangular solutions of the three body problem, surfaces of zero relative velocity, etc.; geometrical and analytical consideration of perturbations. Moulton, Introduction to Celestial Mechanics (Macmillan Co., New York). Two hours per week; for students in Science. (Given biennially; not given in 1933-34.)

# ACTUARIAL SCIENCE

- 71, 72. Business Mathematics. Arithmetical progression; geometrical progression; theory and use of logarithms; interest and discount; equation of payments; annuities; sinking funds; amortization of debts; amortization schedules; capitalized cost; valuation of bonds; depreciation; exchange. Two hours per week; for students in Accountancy.
- 73, 74. The Mathematical Theory of Investment. Interest and discount; equation of payments; annuities certain; amortization of debts; amortization schedules; valuation of bonds; depreciation; building and loan associations; elementary theory of probability; life annuities; net premiums for simple forms of insurance policies; reserves; valuation. Mathematics of Finance, Rietz, Crathorne and Rietz (Henry Holt and Co.). Tables of Applied Mathematics, by J. W. Glover, Parts I and IV (bound together), G. Wahr, Ann Arbor. References: Mathematics of Finance, L. L. Smail (McGraw-Hill Book Co.); Institute of Actuaries Text Book, Part I. Two hours per week; for students in Arts and Science.
- 75, 76. STATISTICS. General statistical methods; frequency distributions; various types of averages; measures of variation and skewness, probable error; time series; measurement of trend; measurement of relationship; linear and non-linear correlation; curve fitting; normal curve of error. First course in Statistical Method, G. I. Gavett (McGraw-Hill Book Co.). A First Course in Statistics, D. C. Jones. References: Statistical Methods, F. C. Mills (Henry Holt & Co.); Introduction to Statistics, G. U. Yule. Two hours per week.
- 77. THEORY OF PROBABILITY. The general theory of probability; inverse probability; the mortality table; probabilities of life; expectations of life; survivorship probabilities; formulae for the law of mortality. Hall and Knight's Higher Algebra; Actuarial Mathematics, H. Freeman; Life Contingencies, by E. F. Spurgeon (C. & E. Layton). Reference: Introduction to Mathematical Probability, J. L. Coolidge. Two hours per week; for students in Arts and Science.
- 78. FINITE DIFFERENCES. A course of lectures on the Calculus of Finite Differences and the Theory of Operators. Fundamental difference forms; factorial expansions; symbols of operation; Herschel's and Maclaurin's Theorems; interpolation formulae; central difference formulae; approximations, mechanical quadratures, finite integration, Euler-Maclaurin sum series, Lubbock's, Woolhouse's and Hardy's formulae, convergency, difference equations. Actuarial Mathematics, H. Freeman (Cambridge University Press). Reference: Burn and Brown, The Elements of Finite Differences. Two hours per week; for students in Arts and Science.
- 79, 80. Principles of Life Insurance. Applications of the Calculus and Finite Differences to Life Contingencies. Mortality tables; single-life probabilities of life and death; single-life annuities and assurances; statistical applications of the mortality table; functions involving two or more lives; compound and survivorship probabilities; contingent probabilities; joint life and last survivor annuities and assurances; contingent assurances; reversionary annuities; construction of tables; tables involving two or more causes of decrement and functions dependent thereon; disability notation; accident and disability benefits; general nature of life insurance and annuity contracts; life insurance history; group insurance; industrial life insurance; fraternal in-

surance. Life contingencies. E. F. Spurgeon (C. & E. Layton); Disability Benefits, Arthur Hunter (Actuarial Society of America). References: Life Insurance, J. B. MacLean (McGraw-Hill Book Co.); Advanced Life Insurance, C. K. Knight (J. Wiley & Sons). Four hours per week; for students in Arts and Science.

86. THE THEORY OF ERRORS AND METHOD OF LEAST SQUARES. See applied Mathematics, Course 54.

#### **ASTRONOMY**

- 89. Spherical Trigonometry. Derivation of formulae, solution of the spherical triangle, areas of spherical triangles and polygons, applications to practical problems in geodesy and astronomy. Moritz's Spherical Trigonometry (Wiley & Sons). Two hours per week; for students in Engineering.
- 91, 92. General Astronomy. A study of the skies; evening observations; methods of locating celestial objects; the shape and motions of the earth; the sun and eclipses; the moon; the planets; comets and meteors; the sidereal universe; nebulae; modern conceptions of the Universe; recent astronomical discoveries. Text Book: An Introduction to Astronomy, by F. R. Moulton (new edition). Star Guide for Beginners, H. R. Kingston, Phillips' Planisphere. Two hours per week; for students in Arts and Science.
- 93. Descriptive and General Astronomy. A short course specially devoted to those parts of astronomy necessary to surveying. The shape and motions of the earth; the constellations; systems of co-ordinates; refraction; aberration; parallax, eclipses; time, equation of time, conversion of time. Moulton, Introduction to Astronomy. Two hours per week; evening observations; for students in Engineering.
- 96. MATHEMATICAL AND PRACTICAL ASTRONOMY. The solution of the astronomical triangle; time; conversion of time; the ephemeris; determination for any date of the apparent places of stars from the star catalogues; corrections for refraction, parallax, diurnal aberration and dip, to be applied to observed co-ordinates; description and working principles of the sextant, transit theodolite, observatory transit, and zenith telescope; the errors of these instruments and methods of dealing with them; methods of determining latitude, time, longitude and azimuth; practical observations and their reduction. Two hours per week; for students in Science and Engineering.
  - 97, 98. CELESTIAL MECHANICS. See Applied Mathematics, course 61, 62.

#### **GRADUATE COURSES**

Graduate courses cannot normally be given as full lecture courses. Students with a Pass degree from this University, or its equivalent, will take such undergraduate courses as are available and have not already been taken by them, until the equivalent of the Honors degree is reached. Thereafter such courses may be taken but full credit values as graduate courses will not normally be allowed. The following courses have been given from time to time, partly as lecture and partly as reading courses, and will be offered again as required. Their extent also will vary according to circumstances. They should not therefore be understood as necessarily carrying the same weight as undergraduate courses.

Students are advised that admission to courses as a graduate student does not imply admission to candidacy for the M.A. degree. Admission to the latter will be granted only if the student's work gives reasonable promise of ability to complete his thesis for that degree.

101-Algebraic Invariants.

102-Theory of Functions of a Real Variable.

103—Calculus of Variations (Elementary Course).

104—Elliptic Integrals and Fourier Series.

105-Theory of Functions of a Complex Variable (Second Course).

106-Applied Analysis.

- 107—Vector Analysis.

  108—Modern Geometry.

  - 109—Differential Geometry.
    - 110—Elliptic Functions.
    - 111—Celestial Mechanics I and II. 112—Actuarial Science I, II, III and IV.
- 112—Actuarial Science 1, 11, 111 and 1v.
  113—Theory of Relativity.
  114—Casualty Actuarial Theory.
  115—Mathematical Theory of Statistics.
  116—Theory of Numbers.
  119—Algebraic Numbers.
  120—Modern Higher Algebra.

# DEPARTMENT OF PHILOSOPHY AND PSYCHOLOGY

Henry W. Wright, B.A., Ph.D. Rupert C. Lodge, M.A. Professor สาราชาวาท (ปี ที่สาราชาวาท สาราชาวาท การาชาวาท (ค.ศ.) อาการาชาวาท สาราชาวาท

Philosophy II—Course 3b, 4b. This may be combined with 1, 2.

Philosophy III—Course 5, 6.
Philosophy IV—Course 13, 14.

the should not been street at the PHILOSOPHY IVG—Courses 13, 14; 15, 16; 17, 18.

PHILOSOPHY V—Courses 19, 20; 21, 22; 23, 24,

PSYCHOLOGY II—Course 1, 2. This may be combined with 3b, 4b.

Psychology III—Courses 7, 8; 9, 10. (N.B.—1, 2 is a prerequisite for 7, 8.) Psychology IV—Courses 15, 16; 17, 18.

Other combinations may be permitted by the examiners in Philosophy. mth contravers of the first fact for the same or graduate course with not contravers of the same of th

N.B.—For key to system of numbering courses, see page 4.

1, 2. Introductory Psychology (prerequisite for Courses 7, 8) Woodworth's Psychology (new edition). First Term-To page 242. Second Term—Remaining chapters. Two hours a week. Professor Wright.

- 3b, 4b. Logic. Sellers' Essentials of Logic. First Term—To end of chapter XIII. Second Term—Chapter XIV to end of book. Two hours a week. *Professor Lodge*.
- 5, 6. HISTORY OF PHILOSOPHY (Ancient and Mediæval). First Term—Bakewell, Source-book in Ancient Philosophy, pages 1 to 179; Plato, Republic; Rogers, Student's History of Philosophy, pages 1 to 101. Second Term—Aristotle, Ethics; Bakewell, Source-book, pages 217 to 393; Rand, Classical Moralists, Selections from St. Augustine, Abelard, and St. Thomas; Rogers, Student's History, from page 101 to end of mediæval period. Four hours a week. Professor Lodge.
- 7, 8. Social Psychology. First Term—Ewer, Social Psychology. Second Term—Wright's Moral Standards of Democracy. Two hours a week. Professor Wright.
- 9, 10. OBJECTIVE PSYCHOLOGY with exercises and experiments. (Not open to extra-mural students.) Two hours a week. *Professor Wright*.
- 13, 14. HISTORY OF PHILOSOPHY (Modern). First Term—Rand, Classical Modern Philosophers, selections from Bruno to Locke, inclusive, and also Condillac; Rogers, Student's History of Philosophy, Modern period, to Locke. Second Term—Rand, selections from Berkeley, Hume, and Kant to Hegel, inclusive; Rogers, to end of Hegel. Four hours a week. Professor Lodge.
- 15, 16. PROBLEMS OF PHILOSOPHY. Patrick, Introduction to Philosophy. First Term—To page 208. Second Term—Remaining chapters. Two hours a week. *Professor Wright*.
- 17, 18. Problems of Human Conduct and Social Adjustment. Two hours a week. Professor Wright.
- 19, 20. PHILOSOPHICAL SEMINAR. A two-year course in the writing of philosophical essays. Open only to honor students. Two hours a week. Professor Lodge.
- 21, 22. HISTORY OF PHILOSOPHY. Post-Hegelian Philosophy, down to the present day. Three hours a week. Professor Lodge.
- 23, 24. Psychological or Philosophical Seminar. Open only to Honor students. Three hours a week. *Professor Wright*.

Other undergraduate courses, instruction in which is not provided at the University, but which may be studied for the B.A. degree:

- 3a, 4a. ETHICS. Wright's Self-Realization. First Term—Part I and Part II to end of Chapter V. Second Term—From Part II, Chapter VI to end of book. Two hours a week. (May be substituted for, or combined with, 1, 2; or 3b, 4b.)
- 35, 36. PHILOSOPHY OF RELIGION. Galloway, Philosophy of Religion. Two hours a week.
- 37, 38. ADVANCED ETHICS. Dewey and Tufts, Ethics. Two hours a week. (May be substituted for 17, 18.)
- 39, 40. Scholastic Philosophy II—Logic. Turner, Lessons in Logic; with references to Gilson (Burroughs), Thomism; Sellars, Logic; Mercier, Logic. Two hours a week.
- 41, 42. Scholastic Philosophy II—Psychology. Maher, Psychology; with references to Hill, Mercier, and Coffey. Two hours a week.

- 43, 44. SCHOLASTIC PHILOSOPHY III—ETHICS. J. Elliott Ross, Christian Ethics; with references to Cronin, Ethics; Glenn, Ethics; Mercier, Ethics. Four hours a week.
- 45, 46. SCHOLASTIC PHILOSOPHY IV—METAPHYSICS. Mercier, General Metaphysics; with references to Rickaby, Metaphysics; Coffey, Ontology; Windle, Church and Science. Four hours a week.
- 47, 48. Scholastic Philosophy IV—History of Philosophy. Turner, History of Philosophy; with references to Thilly, Burnet (Greek Philosophy), De Wulf (Mediæval Philosophy), and Perry (Present Day). Four hours a week.

NOTE-45, 46 and 47, 48 may be combined as Scholastic Philosophy IVG.

## GRADUATE COURSES

Students intending to take graduate work in Philosophy should in all cases consult the Examiners in Philosophy, in order to ascertain what type of problem they are fitted to investigate.

#### DEPARTMENT OF PHYSICS

Frank Allen, M.A. Ph.D., LL.D., F.R.S.C.	Professor
R. K. McClung, M.A., D.Sc., F.R.S.C. Associate	Professor
J. F. T. Young, M.A., Ph.D. Associate	Professor
W. A. Anderson, M.A., M.Sc. Assistant	Professor
P. A. Macdonald, M.Sc., Ph.D. Assistant	Professor

Physics IA—Courses 1a, 2a; 3a, 4a.

PHYSICS I-Courses 1, 2; 3, 4. (Prerequisite, Grade XI Physics).

Physics II—Courses 7, 8; 15, 16. (Prerequisite, Grade XII Physics or Physics I.)

Physics IIM—Courses 5, 6. (Prerequisite, Grade XII Physics or Physics I.)

Physics III—Courses 9, 10; 17, 18. (Prerequisite, Physics II.)

Physics IV—Courses 25, 26; 27, 28. Prerequisite, Physics III.)

Physics IVH—Courses 25, 26; 27, 28, and four credits in Honors Courses. (Prerequisite Maths. II, at least.)

PHYSICS V-Eight credits in Honors Courses.

Second Year Pharmacy-Courses 1, 2; 3, 4.

First Year Pharmacy (Degree Course) - Courses 1, 2; 3, 4.

Second Year Pharmacy (Degree Course) - Courses 7, 8; 15, 16.

†First Year Engineering-Courses 11, 12; and 19; 20.

Second Year Engineering—Courses 13; 14; and 21; 22.

Third Year Engineering (Electrical)—Courses 23, 24.

First Year Architecture-Courses 1, 2; 3, 4.

<sup>†</sup>Note.—Starting with the Session 1932-1933, Grade XI Physics will be a prerequisite for Courses 11 and 12.

Second Year Architecture-Courses 11; 12.

The following courses are designed to give a consecutive treatment of both Theoretical and Practical Physics covering the four years of the general course in Arts and Science.

PHYSICS I-Courses 1, 2; and 3, 4.

PHYSICS II—Courses 7, 8; and 15, 16.

PHYSICS III—Courses 9, 10; and 17, 18.

PHYSICS IV—Courses 25, 26.

Students intending to enter courses in Physics in the Senior Honors Division in Science are advised to consult pages 39-40 for guidance as to choice of subjects in the Junior Division and in the First Year of the Senior Division.

N.B.—For key to system of numbering courses, see page 4.

- \*1a, 2a. General Physics. A lecture course in General Physics, illustrated by demonstration experiments. First Term—Mechanics, Properties of Matter and Heat. Second Term—Electricity and Light. Four hours a week. Text book: "New Practical Physics," by Black and Davis.
- \*1, 2. General Physics. A lecture course in General Physics, illustrated by demonstration experiments. First Term—Mechanics, Properties of Matter, and Heat. Second Term—Electricity and Light. A knowledge of Grade XI Physics is essential. Three hours per week. Text book: "New Practical Physics," by Black and Davis. Assistant Professor Anderson.
- 3a, 4a. GENERAL PHYSICS (PRACTICAL). A laboratory course to accompany lecture courses 1a, 2a. One practical period of three hours per week. Assistant Professor Anderson.
- 3, 4. GENERAL PHYSICS (PRACTICAL). A laboratory course to accompany lecture courses 1, 2. One practical period of three hours per week. Assistant Professor Anderson.
- 5, 6. GENERAL PHYSICS (PRACTICAL). A laboratory course specially designed to illustrate those principles of Physics which are of particular service in Medicine. This course is intended only for students preparing to enter the Faculty of Medicine and is not open for election by students proceeding to the B.A. or the B.Sc. degree. Reference Book, Practical Physics, Allen and Moore. One practical period per week. Associate Professor Young.

  7, 8. MECHANICS, PROPERTIES OF MATTER, HEAT AND SOUND. An
- 7, 8. MECHANICS, PROPERTIES OF MATTER, HEAT AND SOUND. An elementary but more detailed treatment of those subjects than Course 1, 2. Text Books: Elementary Mechanics, Jessop and Havelock, The Tutorial Physics: Heat, Stewart and Satterly, Text Book of Sound, Catchpool. Three hours per week. Assistant Professor Anderson.
- 9, 10. ELECTRICITY, MAGNETISM AND LIGHT. This course is similar in character to Course 7, 8. Three hours per week. Professor Allen.
- 11, 12. HEAT, LIGHT AND SOUND. This course is designed to meet the requirements of Engineering students of the First Year. Two hours per week. Associate Professor McClung.
- 13, 14. ELECTRICITY AND MAGNETISM. This course is designed to meet the requirements of Engineering students of the Second Year. Two hours per week. Associate Professor McClung.
- 15, 16. MECHANICS, HEAT AND SOUND. A laboratory course in the theory and methods of physical measurements, to be taken in conjunction

<sup>\*</sup>A knowledge of Trigonometry is highly desirable in the study of Elementary Physics. Students may obtain this in Mathematics IA or Mathematics IIA.

with Courses 7 and 8. One practical period of three hours per week for each student. Assistant Professor Anderson.

- 17, 18. ELECTRICITY, MAGNETISM AND LIGHT. A laboratory course similar in character and method to course 15, 16. One practical period of three hours per week for each student. *Professor Allen*.
- 19, 20. MECHANICS, HEAT, LIGHT AND SOUND. A laboratory course especially for Engineering students. Associate Professor McClung.
- 21, 22. ELECTRICITY AND MAGNETISM. A course similar to 17, 18, especially for Engineering students. Associate Professor McClung.
- 23, 24. ELECTRICAL MEASUREMENTS. This course comprises a more advanced study, both theoretical and practical, of electrical measurements and is especially suited to students in Electrical Engineering. It will involve the use of electrical standards, quantitative measurements of capacity of condensers, self and mutual induction, magnetic induction and hysteresis, potentiometer measurements, high and low resistance and photometry. Associate Professor McClung.
- 25, 26. Modern Theories of Physics. A general course discussing the molecular theory, production, nature and properties of the electron. Zeeman effect, X-rays and crystal structure, positive rays and isotopes, photoelectricity, radioactivity, atomic structure and origin of radiation. Reference Texts: Andrade, The Structure of the Atom; Crowther, Ions, Electrons and Ionising Radiations; Kaye, X-Rays; Rutherford, Radioactivity; Bragg, X-Rays and Crystal Structure. Three hours per week. Associate Professor Young.

#### HONORS COURSES

The methods of the calculus will be used in these courses and students will be required to have a sound knowledge of both Differential and Integral Calculus. Mathematics II is a prerequisite.

The courses to be given in any year will be selected by the Department from the following:

- 25, 26. As above. Three hours per week.
- 27, 28. As above. One period per week.
- 29, 30. ADVANCED ELECTRICITY AND MAGNETISM. This course will include Theory of Potential and Elementary Electromagnetic Theory. Text books: Starling, Electricity and Magnetism; J. J. Thomson, Elements of the Mathematical Theory of Electricity and Magnetism. Three hours per week. Associate Professor Young.
- 31, 32. ADVANCED HEAT AND ELEMENTARY THERMODYNAMICS. Text books; Poynting and Thomson, Heat; Preston, Theory of Heat; Birtwistle, Thermodynamics; Hart, Advanced Heat. Three hours per week. Associate Professor Young.
- 33, 34. PROPERTIES OF MATTER. A comprehensive treatment based on Poynting and Thomson, Properties of Matter; Newman and Searle, Properties of Matter. Two hours per week.
- 35, 36. Physical Optics. This course will include wave propagation, interference, diffraction, polarization. Text book: The Theory of Light, Preston. Three hours per week. *Professor Allen*.

- 37, 38. MATHEMATICAL PHYSICS. An introductory course based on Houston, An Introduction to Mathematical Physics. Two hours per week.
  - 39, 40. GEOPHYSICS. Associate Professor Young.
- 41, 42. LABORATORY COURSE FOR HONORS STUDENTS. This course is designed to illustrate the above lecture courses. One practical period per week in Fourth Year and two practical periods per week in Fifth Year. Professor Allen and Associate Professor Young.

#### GRADUATE COURSES

The Department will arrange courses for suitably prepared students in Physiological Optics and Acoustics, the Restricted Theory of Relativity, with physical applications, Atomic Structure, and Quantum Theory.

The laboratory and its equipment are available whenever possible to anyone desirous of engaging in original investigation in Physics.

For the treatment of cancer in the Province of Manitoba, there has been established a Cancer Relief and Research Institute which has purchased one gram of radium salt for its purpose.

This large quantity of radium has been placed in the custody of the Department of Physics, under the supervision of Assistant Professor Macdonald. A radium emanation plant is now in operation from which supplies of radium emanation are available for research.

Graduate students who are desirous of undertaking research work in this field will find ample opportunity for such investigations.

# DEPARTMENT OF POLITICAL ECONOMY AND POLITICAL SCIENCE

Archibald Brown Clark, M.A.	Professor
Reginald F. Jones, M.A. Assistant	Professor
Henry Clark Grant, B.S.A., M.A., Ph.D. Assistant	Professor
William J. Waines, M.A.	Lecturer

POLITICAL ECONOMY II—Courses 1, 2.

POLITICAL ECONOMY III—Courses 3, 4.

POLITICAL ECONOMY IV—Courses 5, 6. (Prerequisite, Political Economy III.)

POLITICAL ECONOMY IVG—Courses 5, 6; 11, 12. (Prerequisite, Political Economy III.)

POLITICAL ECONOMY IVH-—Courses 5, 6; 11, 12. (Prerequisite, Political Economy III.)

POLITICAL ECONOMY V—Courses 7, 8; 17, 18. (Prerequisite, Political Economy IVH.)

Master of Arts-Courses 21, 22; 23, 24; 25, 26; 27, 28.

1, 2. Economics. A half-subject elementary course on the Production and Distribution of Wealth, as in Henry Clay's "Economics for the General Reader." First Term—Chapters 1 to 6. Second Term—Chapters 7, 8, 9, 12, 13 and 21 to 25 inclusive. Two hours a week.

Note—This half-subject course is not necessary as a preliminary to the other courses in Political Economy.

3, 4. POLITICAL ECONOMY. A survey of the leading principles of Political Economy, together with the chief landmarks in the history of Economic Theory. A more intensive study of Wages, Profits, Rent, Value, Money and Banking. The student is expected to read the following, together with the relevant parts of other works that may be referred to, in supplement of the lectures.

First Term—Nicholson, "Elements of Political Economy," Intro. and Book I; Book II, Chapters 1 to 4. Mill, "Principles of Political Economy," Prelim. Remarks and Book I; Book II, Chapters 1 to 4. Beckhart, "The Banking System of Canada," pp. 289 to 357. L. L. Price, "Political Economy in England," Chapters 1, 2, 5, 8, 9.

Second Term—Nicholson, Book II, Chapters 6 to 10; Book III, Chapters 1 to 12. Mill, Book II, Chapters 11 to 16; Book III, Chapters 1 to 16, 23, 24, 26. Beckhart, pp. 357 to end. Price, Chapters 3, 4, 6, 7, 10, 11. Four hours a week.

5, 6. Government, Trade and Taxation. A study of the Economic Functions of Government, Foreign Trade Policy and the Principles of Taxation and Public Expenditure. First Term—Adam Smith, "Wealth of Nations," Book II, Chapter 5; Book III, Chapter 1; Book IV, Chapters 1, 2; Book V, Chapter 1. Mill, "Principles of Political Economy," Book III, Chapter 17; Book V, Chapters 1, 8 to 11. Nicholson, "Principles of Political Economy," Vol. III, Book V, Chapters 1 to 4, 14, 19. Bastable, "Theory of International Trade," Chapters 1, 8, 9; and "Commerce of Nations," Chapters 1 to 4, 12 to 15. Second Term—Adam Smith, Book IV, Chapters 3 to 8; Book V, Chapter 2. Mill, Book III, Chapters 18 to 22, 25; Book V, Chapters 2 to 6. Nicholson, Vol. III, Book V, Chapters 5 to 13, 15 to 18. Bastable, "Theory," Chapters 2 to 7, 10 and Appendices; "Commerce of Nations," Chapters 5 to 11, 16 to 18. Seligman's "Essays in Taxation."

Reference will also be made to special parts of Marshall's "Money, Credit and Commerce"; Stamp's "Principles of Taxation," and "Wealth and Taxable Capacity"; Seligman's "Shifting and Incidence of Taxation"; and to the works on Public Finance by Bastable, Adams, Lutz, Plehn, Shirras and Pigou. Four hours a week.

- 7, 8. Economic Theory. A discussion of some of the more difficult problems in Economic Theory, together with the application of Economic Principles to the more important present-day Economic Problems. First Term—Keynes, "Scope and Method of Political Economy," Chapters I to V, with Notes; Marshall, "Principles of Economics," Book III; Book V, Chapters 1 to 9; Taussig, "Principles of Economics," Vol. I. Second Term—Keynes, Chapters VI to X, with Notes; Marshall, Book V, Chapters 10 to 15; Book VI; Appendices G to L; Taussig, Vol. II. Four hours a week.
- 9, 10. HISTORY OF ECONOMIC THEORY. A study of the more important contributions to the historical development of Economic Theory. First Term

—Gray, "Development of Economic Doctrine," Chapters 1 to 6; Haney, "History of Economic Thought," Chapters 1 to 12; Gide and Rist, "History of Economic Doctrines," Books I and II, and Book III, Chapter 1. Second Term—Gray, Chapters 7 to end; Haney, Chapters 13 to 33; Gide and Rist, Book III, Chapter 2, and Books IV and V. For Reference—Ingram, "History of Political Economy"; Higgs, "The Physiocrats"; Bonar, "Philosophy and Political Economy"; Cannan, "History of the Theories of Production and Distribution"; Monroe, "Monetary Theory before Adam Smith," and "Early Economic Thought." Four hours a week. (Not given in 1933-34.)

11, 12. Banking and Finance. A study of the leading banking and credit systems, and of the operation of the foreign exchanges and the stock and produce exchanges.

The student will be expected to read in supplement of the lectures: R. B. Westerfield, "Banking Principles and Practice"; W. R. Burgess, "The Reserve Banks and the Money Market"; Goldenweiser, "The Federal Reserve System in Operation" Pratt; "The Work of Wall Street"; Spalding, "The London Money-Market"; Patterson and Jenks, "International Exchange"; Atwood, "The Stock and Produce Exchanges." For Reference—Kish and Elkin, "Central Banks"; Willis, "The Federal Reserve System"; Kemmerer, "The A B C of the Federal Reserve System"; Withers, "The Meaning of Money" and "International Finance"; Conant, "Principles of Money and Banking"; Dunbar, "Theory and History of Banking"; Moulton, "Money and Banking"; Phillips, "Bank Credit"; Furniss, "Foreign Exchange"; Escher, "Foreign Exchange Explained." Four hours a week.

- 13, 14. Public Finance and Financial Administration. A further study of Public Revenue, Public Expenditure and Public Credit, and of the principles governing the Administration of National Finance, as in Shirras, "The Science of Public Finance"; Pigou, "Public Finance"; Lutz, "Public Finance"; Seligman, "Studies in Public Finance"; E. Hilton Young, "The System of National Finance." Throughout the course, reference will also be given to selected parts of Bastable, "Public Finance"; Adams, "Science of Finance"; Plehn, "Public Finance"; Seligman, "Essays in Taxation"; Higgs, "Financial System of the United Kingdom"; Willoughby, Willoughby and Lindsay, "Financial Administration of Great Britain"; and Stourm, "The Budget." Four hours a week. (Not given in 1933-34.)
- 15, 16. Economic History—Medieval. A study of the Economic History of England to the end of the Middle Ages. Cunningham, "Growth of English Industry and Commerce," Vol. I ("Early and Middle Ages"); Lipson, "Economic History of England—The Middle Ages"; Knight's "Economic History of Europe to the end of the Middle Ages." For Reference—Ashley, "Introduction to Economic History and Theory," and "Surveys, Historic and Economic"; Seebohm, "English Village Community"; Maitland, "Domesday Book and Beyond," and "Township and Borough"; Vinogradoff, "Villainage in England," "The Growth of the Manor," and "English Society in the Eleventh Century"; Gross, "The Guild Merchant"; Unwin, "Guilds and Companies of London"; Hall, "Antiquities of the Exchequer," and "History of the Customs Revenue"; Salzmann, "English Industries in the Middle Ages"; Bland, Brown and Tawney, "English Economic History—Select Documents." Four hours a week. (Not given in 1933-34.)
  - 17, 18. POLITICAL SCIENCE. A critical study of Political Theories in

their relaion to actual political development, and a survey of Comparative Politics. The Nature and Origin of the State; Forms of Government; The Sphere of the State; Principles, Methods and Limitations of Governmental Interference; The Organization of Government; Distribution of Powers.

For reading in supplement of the lectures, students will be referred to: Pollock, "History of the Science of Politics"; I. J. C. Brown, "English Political Theory"; Hobbes, "Leviathan," Part I, chapters 13-15, Part II; Locke, "Civil Government," Book II; Laski, "Political Thought from Locke to Bentham"; Rousseau, "Contrat Social" (Eng. Trans.); Mill, "On Liberty"; Hobhouse, "Liberalism"; MacIver, "The Modern State"; E. Jinks, "The State and the Nation," and to the relevant parts of Maine, "Early History of Institutions"; Sidgwick, "Elements of Politics" and "Development of European Polity"; Mill, "Representative Government"; Bagehot, "English Constitution"; Lowell, "The Government of England" and "Governments and Parties in Continental Europe"; Bryce, "The American Commonwealth," "Studies in History and Jurisprudence" and "Modern Democracies"; Keith, "Responsible Government in the Dominions" and "Imperial Unity and the Dominions." Four hours a week.

19, 20. POLITICAL ECONOMY (for Accountants, Bankers and Business Men). A general survey of the principles governing Production and Distribution of Wealth; and a more intensive study of the Theory of Exchange, including Value, Money, Credit, Banking, the Money-market, the Rate of Interest and the Rate of Discount, International Trade, the Foreign Exchanges, and the Stock Exchange.

Reading in supplement of the lectures: Nicholson, "Elements of Political Economy," a general knowledge of Books I and II, with a more exact knowledge of Book III. MacGibbon, "Introduction to Economics"; Withers, "The Meaning of Money." Two hours a week.

#### GRADUATE COURSES

(Lectures may not be offered in these Courses in 1933-1934.)

- 21, 22. POLITICAL ECONOMY (Major). Marshall, "Money, Credit and Commerce," and "Official Papers"; J. M. Keynes, "A Treatise on Money"; Taussig, "International Trade"; Furniss, "Labour Problems"; Beveridge, "Unemployment," 1930 Edition. (Two Papers.)
- 23, 24. Business Economics (Minor). H. G. Moulton, "Financial Organization of Society"; H. L. Lutz, "Public Finance." (One Paper.)
- 25, 26. Economic History—Modern (Minor). W. Cunningham, "Growth of English Industry and Commerce: Modern Times," Part II; J. H. Clapham, "Economic History of Modern Britain, 1820-1850," and the same author's "Economic Development of France and Germany, 1815-1914"; Knight, Barnes and Flugel, "Economic History of Europe in Modern Times." (One Paper.)
- 27, 28. POLITICAL SCIENCE (Minor). Dicey, "Law and Public Opinion in England"; MacCunn, "Six Radical Thinkers"; E. Barker, "Political Thought in England from Herbert Spencer to the Present Day"; C. E. M. Joad, "Modern Political Theory." (One Paper.)

Note—Candidates for the M.A. Degree in this Department may combine Political Economy with either (a) Economic History or (b) Political Science.

#### SOCIOLOGY

Reginald F. Jones, M.A. Assistant Professor

Principles of Sociology—Courses 1, 2. Applied Sociology—Courses 3, 4.

N.B.-for key to system of numbering courses, see page 4.

- 1, 2. Sociology. (a) First Term—Character and Scope of Sociology, and its relations to Biology, Psychology, Social Psychology, History, Political Economy, and the various social sciences. Methods of Investigation. Society and the Individual. Origin and Evolution of Society. Forms of Association. Socializing Processes. Social Organizations. History of Sociology.
- (b) Second Term—Social Forces, their direction and control. Theory of Social Progress. Social Laws. Social Activities, including conflict and competition, adaptation, exploitation and stratification. Law and Liberty in Society. Relations between various social groups, racial, national, etc. Social Achievement. Social Ends. Four hours per week.

Works of Reference—In calling the attention of students to the following list of books bearing on certain of the subjects to be studied, the examiners in Sociology give notice: (1) That the list is intended for general guidance only, and that all students should take personal advice as to their reading, and (2) that the examiners are in no way bound by this list.

"The Encyclopaedia of the Social Sciences" (now in course of publication); Giddings, "Principles of Sociology"; Ross, "Principles of Sociology"; Spencer, "The Study of Sociology"; Spencer, "Principles of Sociology"; Bagehot, "Physics and Politics"; Muller-Lyer, "History of Social Development"; Barth, "Die Philosophie der Geschichte als Soziologie"; Park and Burgess, "Introduction to Sociology"; R. M. MacIver, "Social Science"; R. M. MacIver, "Community"; Cooley, "Social Organizations"; James Ford, "Social Problems and Social Policy"; Dealey, "Sociology: Its Development and Applications"; C. A. Dawson and W. E. Gettys, "An Introduction to Sociology."

In addition, the "Encyclopaedia of Religions and Ethics" and various general encyclopaedias contain many articles on sociological subjects.

- 3, 4. APPLIED SOCIOLOGY. (a) First Term—Character and Scope of Applied Sociology. Personal Relations. Voluntary Associations. Social Institutions; Marriage and the Family; the Church, Education. Social Control by means of the State the exception rather than the rule; Direct State Control illustrated by selected groups of instances, e.g., Public Administration and the Civil Service, Relations between Parliament and certain Boards or Commissions, Methods of regulating certain kinds of trade, etc.
- (b) Second Term—Normal Functions of Society with little or no State Control; illustrations from Business, Law, Medicine, etc., considered in their social aspects. The Economic Problem; the predominance of Private Enterprise, and the scope of Public Ownership and Public Management in certain instances. Population and Immigration. Social Pathology: Poverty, Public

and Private Relief; Mental Deficiency; Crime, Juvenile Delinquency, Probation, Prisons and Parole. Principles and Methods of Social Reform and Improvement. Four hours per week.

Works of Reference—In calling the attention of students to the following list of books bearing on certain of the subjects to be studied, the examiners in Sociology give notice: (1) That the list is intended for general guidance only, and that all students should take personal advice as to their reading; and (2) that the examiners are in no way bound by this list.

"The Encyclopaedia of the Social Sciences" (now in course of publication); James Ford, "Social Problems and Social Policy"; R. M. MacIver, "Society: Its Structure and Changes"; Lester F. Ward, "Applied Sociology"; Ross, "Principles of Sociology"; W. G. Sumner, "Folkways"; Helen Bosanquet, "The Family"; The Canada Year Book and other publications of the Dominion Bureau of Statistics; Robert M. Dawson, 'The Principle of Official Independence, with particular reference to Canada"; R. M. Dawson, "The Civil Service of Canada"; William A. Robson, "From Patronage to Proficiency in the Public Service"; R. G. Hawtrey, "The Economic Problem"; F. Creedy, "Human Nature in Business"; A. M. Carr-Saunders, "Professions: Their Organization and Place in Society." C. Delisle Burns, "An Introduction to the Social Sciences."

# DEPARTMENT OF ZOOLOGY

Robert	: A.	Wardle,	M.Sc	Professor
Ferris	Near	ve, M.Sc		Professor

ZOOLOGY II—Courses 1, 2.

Zoology IIM—Courses 3, 4.

Zoology III—Courses 5, 6. (Prerequisite, Zoology II or IIM.)

Zoology IV—Courses 7, 8. (Prerequisite, Zoology III.)

Zoology IVH—Courses 7, 8 and 11, 12 or 13, 14. (Prerequisite, Zoology III.)

Zoology V—Courses 9, 10 and 11, 12 or 13, 14. (Prerequisite, Zoology IVH.)

Students intending to enter courses in Zoology in the Senior Honors Division in Science are advised to consult pages 39-40 for guidance as to choice of subjects in the Junior Division and in the First Year of the Senior Division.

1, 2. Animal Biology. The principles of Animal Biology; the morphology and physiology of a series of unicellular and multicellular animals; the elements of animal ecology and classification. Arranged for Second Year Students in Arts and Science. Textbook: Haupt, Fundamentals of Biology. Two lectures per week and three laboratory hours per fortnight throughout the session.

- 3, 4. General Zoology. The comparative morphology and physiology of a series of animal types; the elements of animal cytology, histology and embryology; the principles of heredity; the elements of medical zoology. Arranged for Pre-Medical Students and Honors Science Students. Textbook: O'Donoghue, Introductions to Zoology, or Borradaile, Zoology for Medical Students. Three lectures and five laboratory hours per week throughout the session.
- 5, 6. ZOOLOGY OF INVERTEBRATA. The morphology, physiology and classification of invertebrate animals. Arranged for Third Year Students. Textbook: Hegner, College Zoology. Three lectures and three laboratory hours per week throughout the session.
- 7. General Entomology. An introduction to the structure, physiology and classifications of insects. Textbook to be arranged. Two lectures and six laboratory hours per week during the First Term.
- 8. ZOOLOGY OF CHORDATA. The structure, physiology and classification of chordate animals. Textbook: De Beer, Vertebrate Zoology. Two lectures and six laboratory hours per week during the Second Term.
- 9. Parasitology. An account of the structure, life cycle, and pathogenicity of the protozoan, helminth and arthropodan parasites of man, domesticated animals, furbearing animals and edible fishes. Two lectures and six laboratory hours per week during the First Term. Textbooks: Wardle, Principles of Applied Zoology; Riley and Christenson, Guide to Study of Animal Parasites.
- 10. Embryology of Chordata. An outline of the embryology of the Chordata studied in a series of selected types. Textbooks: Kellicott, Chordate Development; Ballantyne, Introduction to the Technique of Section Cutting. Two lectures and six laboratory hours per week during the Second Term.
- 11. Animal Ecology. The relation of animals to their environment; the influence of light, temperature, moisture, gravity, water currents, etc., or animal behaviour. Textbook: Adams, Guide to the Study of Animal Ecology. Two lectures and three laboratory hours per week during the First Term in alternate sessions. (Not given in 1933-1934.)
- 12. Hydrobiology. The physiology and ecology of aquatic animals, with particular reference to the biological problems of the Prairie Lakes. Textbook: Needham, Guide to the Study of Freshwater Biology. Two lectures and three laboratory hours per week during the Second Term, in alternate sessions. (Not given in 1933-1934.)
- 13. Physiological Zoology. The fundamental physiological processes of animals and the basic factors of animal behaviour. Textbook: Rogers, Textbook of Comparative Physiology. Two lectures and three laboratory hours per week during the First Term, in alternate sessions.
- 14. MICROTECHNIQUE. The structure of, and methods of using, the optical instruments and reagents used in biological research. Texbook: Guyer,

Micrology. Two lectures and three laboratory hours per week in the Second Term, in alternate sessions.

GRADUATE COURSES. Graduate Courses consisting of two seminars per week and three hours of laboratory or library work will be provided in advanced phases of Morphology, Cytology, Ecology, Entomology, Experimental Zoology and Parasitology.

RESEARCH. Laboratory facilities are available to any qualified investigator desirous of conducting biological investigations.

Departmental Requirements for the degree of Master of Science or Master of Arts.

Candidates with the degree of Bachelor of Arts or Pass Bachelor of Science must complete two years of work in the Department of Zoology and must attend—

- (1) In the first year of graduate work the courses comprised in Zoology V, together with further courses to the value of eight units, four of which may be taken in Zoology.
  - (2) In the second year of graduate work, two graduate courses in Zoology, and
- (3) In the first or second graduate year must complete and pass an examination in a Minor Subject, preferably in some other Department.

Candidates with the degree of Honors Bachelor of Science must complete one year's work in the Department of Zoology, must attend two graduate courses in Zoology and must complete and pass an examination in a Minor Subject, preferably in some other Department.

All Candidates will be required to submit a thesis based upon original work carried out under the direction of the Department of Zoology, and in a condition suitable for immediate publication, and in addition they must pass an oral examination on the subject of the thesis and a written examination upon the subjects of the graduate courses.

# BIBLICAL GREEK

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BIBLICAL GREEK IA—Courses 1, 2.

BIBLICAL GREEK I—Courses 3, 4. (Prerequisite, Biblical Greek IA or Matriculation Greek I.)

BIBLICAL GREEK II—Courses 5, 6. (Prerequisite, Biblical Greek I.)

BIBLICAL GREEK III—Courses 7, 8. (Prerequisite, Biblical Greek II.)

BIBLICAL GREEK IV—Courses 9, 10. (Prerequisite, Biblical Greek III.)

N.B.—for key to system of numbering courses, see page 4.

1, 2. Huddilston's Essentials of New Testament Greek will be covered. Firm term: Lessons I-XX. Second term; Lessons XXI-XXXII, with a read-

For General Requirements for M.A. and M.Sc., refer to pages 31-34; 42-45.

ing of the Selections for Translation and a study of the Syntax. Four hours a week.

- 3. (a) The Gospel According to St. Mark, with a study of the characteristics of its style and language. Equivalent to three-quarters of the paper. (b) A thorough review of the grammar, with a study of Nunn, A Syntax of New Testament Greek, pages 25-86, with exercises in composition based on the prescribed reading. Equivalent to one-quarter of the paper. Four hours a week.
- 4. (a) The Gospel According to St. Matthew (Chapters I, II, V-VII, X, XIII, XVIII, XXII), the Gospel According to St. Luke (Chapters II, IV, VI, X-XII, XIV-XVI), with a study of the characteristics of their style and language. Equivalent to three-quarters of the paper. (b) A study of Nunn, A Syntax of New Testament Greek, pages 87-134, with exercises in composition based on the prescribed reading; with a survey of the Synoptic Problem (lectures or article by F. D. V. Narborough, "The Synoptic Problem," in Gore, A New Commentary on Holy Scripture). Equivalent to one-quarter of the paper. Four hours a week.
- 5. (a) The Acts of the Apostles, with a study of the characteristics of the style and language of the book and with constant reference to Burton's New Testament Moods and Tenses and Robertson's or Moulton's larger grammars. Equivalent to three-quarters of the paper. (b) A literary introduction to the Book of Acts; and a study of Early Christianity. Lectures or the Introduction to the Book of Acts in Gore's Commentary; and J. M. Wilson, The Origin and Aim of the Acts of the Apostles. Equivalent to one-quarter of the paper. Four hours a week.
- 6. (a) I Thessalonians (Chapters I-II, IV); II Thessalonians (Chapter II); Galatians (Chapters I-II, V); I Corinthians (Chapters I-II, VIII, XIII-XV); H Corinthians (Chapters V, XI); Romans (Chapters I-III, VI, VIII, X); Ecclesiasticus (Chapters I-VIII); with a study of the characteristics of the style and language of the several books and with constant reference to Burton's New Testament Moods and Tenses and Robertson's or Moulton's larger grammars. Equivalent to three-quarters of the paper. (b) A literary introduction to the books read; and a study of the pagan background of Early Christianity. Lectures or the Introduction to the several books in Gore's Commentary; and Glover, The World of the New Testament and Tucker, Life in the Roman World of Nero and St. Paul, Chapters I-VII, XIX, XXI. Equivalent to one-quarter of the paper. Four hours a week.
- 7. (a) Ephesians (Chapters I-IV); Colossians (Chapters I-III); Philemon; Philippians (Chapters I-IV); Hebrews (Chapters I-III, X, XII-XIII); II John; the Gospel According to St. John (Chapters I-V); I Maccabees (Chapters I-VI); with a study of the characteristics of the style and language of the several books and with constant reference to Burton's New Testament Moods and Tenses and Robertson's or Moulton's larger grammars. Equivalent to three-quarters of the paper. (b) A literary introduction to the books read; and the history of the Intertestamental and New Testament Periods (to the close of the reign of Herod the Great); and a survey of the Apocalyptic movement and literature. Lectures or the Introductions to the several books in Gore's Commentary; C. M. Grant, Between the Testaments, Part I; and article by H. T. Andrews, "Apocalyptic Literature," in Peake's

Commentary on the Bible. Equivalent to one-quarter of the paper. Four hours a week.

- 8. (a) I Timothy; II Timothy (Chapters II-III); Titus (Chapters I-II); James; I Peter (Chapters I-II); II Peter (Chapters II); Jude; the Revelation of John (Chapters I-II, VII, XVII, XIX, XXI); the Wisdom of Solomon (Chapters I-VII); with a study of the characteristics of the style and language of the several books and with constant reference to Burton's New Testament Moods and Tenses and Robertson's or Moulton's larger grammars. Equivalent to three-quarters of the paper. (b) A literary introduction to the books read; and a study of Hellenistic Judaism; a survey of the books of the Apocrypha; and a study of the textual criticism of the Bible. Lectures or the Introduction to the several books in Gore's Commentary; and W. W. Tarn, Hellenistic Civilization, Chapters III-VI, X; C. M. Grant, Between the Testaments, Chapters XIII and XIV; and articles by L. E. Binns, "Texts and Versions (Old Testament)" and C. H. Turner "The Textual Criticism of the New Testament" in Gore's Commentary. Equivalent to one-quarter of the paper. Four hours a week.
- 9. Conybeare & Stock, Selections from the Septuagint, pages 108-142, 205-221, 265-290, with reference to the grammar of Septuagint Greek contained therein; Letters of Aristeas; Selections from Josephus. Four hours a week.
- 10. IV Maccabees; selections from Philo (Life of Moses, Book 2; Decalogue); selections from Lucian. Four hours a week.

#### BIBLICAL LITERATURE

Instruction in Biblical Literature is provided only in the affiliated Colleges.

BIBLICAL LITERATURE III—Courses 3, 4, 7, 8.
BIBLICAL LITERATURE IV—Courses 3, 4, 7, 8.

(Biblical Literature 1, 2, 5, 6 will be offered in 1934-1935.)

Hebrew Students may substitute for Biblical Literature 7 and 8 Hebrew Courses 7 and 8 or 11 and 12.

# OLD TESTAMENT

- 1. THE EARLY PERIOD. The books concerning the history, archæology and religious development of Israel from the earliest times till the Conquest of Canaan with minute investigations of selected passages. English Bible (revised version) or that of the Jewish Publication Society. Kent, Historical Bible, Heroes and Crises, or Clarendon Bible, volumes 1, 2, 6. Two hours.
- 2. THE MONARCHY. The books concerning the history, archæology and religious development of Israel and Judah from the time of the Judges to the end of Hezekiah's reign. Kent, Founders and Rulers, Kings and Prophets; or Clarendon Bible, volumes 2, 3. English Bible (revised version), or that of the Jewish Publication Society. Two hours.

- 3. THE EXILE. The books concerning the history, archæology and religious development of the Jewish Kingdom from the reign of Manasseh till the close of the Babylonian Exile, with minute investigations of selected passages. English Bible (revised version), or that of the Jewish Publication Society. Kent, Kings and Prophets, Makers and Teachers of Judaism, or the Clarendon Bible, volumes 3, 4. Two hours.
- 4. Post-Exilic Times. The books concerning the history, archæology and religious development of the Jewish Community from the Return from the Babylonian Captivity till the Roman Period with minute investigations of selected passages. English Bible (revised version), or that of the Jewish Publication Society. Kent, Makers and Teachers of Judaism or Clarendon Bible, volumes 4, 5. Two hours.

# **NEW TESTAMENT**

- 5. The political, economic and religious background of the times of Jesus beginning with the Roman Period. The life of Jesus, with a critical study of the Synoptic Gospels as sources for the life of Jesus, involving a consideration of the authorship, aim, and characteristics of these Gospels. Riggs—History of the Jewish People, Greek and Roman Periods; MacKay, John—The Life of Lives; Bethune-Baker, J. F.—Early Traditions about Jesus; Vincent Taylor—The Gospels. Two hours a week with assigned essay work.
- 6. The History of the Christian Church from the death of Jesus to the destruction of Jerusalem, with a detailed study of the life of Paul. The Acts of the Apostles will be studied in the Revised Version as the source of the history of the Early Church and of the life of Paul. The aim, authorship and characteristics of the Acts will receive special consideration. Blount—The Acts of the Apostles; MacKay, John—Life of St. Paul; Ramsay—St. Paul, the Traveller and Roman Citizen. Two hours a week with assigned essay work.
- 7. The Growth of the Christian Literature, involving a study of its language, the making of the books, and their transmission. The following letters of the New Testament will be critically studied: Romans, I and II; Corinthians, Philippians, I Timothy and I Peter. Hunter, C. F.—Life History of the New Testament.

The study of the letters mentioned above will include such topics as: The contents, the teachings, the date, the authorship, the genuineness and the circumstances surrounding the composition of each, as in the Abingdon Bible Commentary or any other authorative work. Two hours a week with assigned essay work.

- 8. The Books of the New Testament appearing after 70 A.D., with a study of apocalyptic literature in the first century of the Christian era. This will involve a survey study of St. John's Gospel, the Epistle to the Hebrews, II Peter, Revelation. This will be followed by a survey of the stages through which the New Testament, Greek and English, has passed until the present Revised Version.
- Scott, E. F.—The Fourth Gospel; Goodspeed—Hebrews (The Bible for Home and School); Dean, J. T.—The Book of Revelation; Smyth, Patterson—How we got our Bible. Two hours a week with assigned essay work.

#### **HEBREW**

Instruction in Hebrew is provided only in the affiliated Colleges.

HEBREW I-Courses 1, 2.

HEBREW II—Courses 3, 4. (Prerequisite, Hebrew I.)

HEBREW III—Courses 5, 6, 7, 8. (Prerequisite, Hebrew II.)

HEBREW IV—Courses 5 and 6 or 9 and 10, 11, 12. (Prerequisite, Hebrew III.)

HEBREW IVH—Courses will be outlined on request.

HEBREW V-Courses will be outlined on request.

- 1, 2. Harper's Method and Manual (Smith). First Term, exercises 1-17, inclusive. Second Term, exercises 18-30, inclusive. Genesis, chapter 22; Exodus, chapter 2. Four hours.
- 3, 4. Harper's Method and Manual (Smith). First Term, exercises 31-44, inclusive. Second Term, exercises 45-56. Exodus, chapters 3, 12; Judges, chapters 17, 18; Psalms, 121, 122, 130, 137. Four hours.
- 5. Hebrew Narrative, Legal and Poetic. (a) Joshua, chapter 2, 7; Leviticus, chapter 25; Nehemiah, chapter 5. (b) Deuteronomy, chapter 33; Isaiah, chapters 58, 61; Song of Solomon, chapters 5, 6; Lamentations, chapter 4; Psalms, 92, 97, 107. Two hours.
- 6. Hebrew Prophetic. (a) Amos, chapters 1, 2, 3, 4, 5, 6, 7. (b) Amos, chapters 8, 9; Zechariah, chapters 1, 2, 3, 4, 5, 6, 7. Two hours.
- 7. THE EARLY HISTORY, ARCHÆOLOGY AND HISTORICAL GEOGRAPHY OF SYRIA AND PALESTINE. Paton, Syria and Palestine; Hall, The Near East; The Cambridge Ancient History; Barton, Archæology and the Bible; G.A. Smith, Historical Geography; Olmstead, History of Syria and Palestine; Peritz, Old Testament History. Two hours.
- 8. The History and Archæology of Israel and Judah from the Time of the Early Monarchy to the Maccabean Period. Bailey and Kent, History of the Hebrew Commonwealth; Barton, Smith, Olmstead. Two hours.
- 9. Hebrew, Prophetic and Dramatic. (a) Hosea, chapters 1, 2, 3, 4, 5, 6, 7, 11, 13, 14. (b) Job, chapters 1, 2, 3, 4, 32, 40, 42. Two hours.
- 10. Hebrew, Prophetic and Apocalyptic. (a) Jeremiah, chapters 1, 7, 11, 18, 26. (b) Daniel, chapters 8, 9, 10, 11, 12. Two hours.
- 11, 12. OLD TESTAMENT INTRODUCTION, CRITICISM, RELIGION. (a) Firm Term: The Pentateuch, The Former and Later Prophets; Synopsis of the Religion of Israel, Prof. W. G. Adeney; Peake's Commentary. Gray; Critical Introduction to the Old Testament; Bennett and Adeney; Driver; Chapman (b) Second Term: The Writings; Synopsis of Cornill; The Prophets of Israel; Geden; Introduction to the Hebrew Bible, chapters 1, 2, 3, 4, 5, or Kenyon; Our Bible and the Ancient Manuscripts, chapters 1, 2, 3, 4, 5. Two hours.

13, 14. RELIGION OF ISRAEL. (a) First Term: H. P. Smith, chapters 1-10; Synopsis of Introduction to the Pentateuch; Carpenter, Peake's Commentary. (b) Second Term: H. P. Smith, chapters 11-20; Synopsis of Canon and Text of the Old Testament and the Development of Old Testament Literature; Peake, Peake's Commentary. Two hours. (1934-1935.)

Note—Essays and synopses are to be handed to the Registrar on or betore December 1st in case of First Term Courses, and on or before April 1st in case of Second Term courses. In connection with courses 5, 6, 9, 10, syntactical principles are to be mastered, use being made of the syntax of either A. B. Davidson or Harper. For interpretation, the Century, Cambridge, Expositors or Peake's Bible Commentaries may be used. In connection with courses 7, 8, 11, 12, the English Bible (revised version) or that of the Jewish Publication Society should be used.

#### ICELANDIC

ICELANDIC I—Courses 1, 2; 3, 4. (Prerequisite, Matriculation Icelandic.) ICELANDIC II—Courses 5, 6, 7, 8. (Prerequisite, Icelandic I.)

N.B.-for key to system of numbering courses, see page 4.

- 1, 2. Grammar. An Elementary Grammar of Old Icelandic (H. M. Buckhurst, Methuen & Co.) (a) First Term: Chapters 1 to 3; (b) Second Term: Chapters 4 to 9. One hour a week.
- 3, 4. AUTHORS. Easy Readings in Old Icelandic (W. A. Craigie); I. B. Hutchen, Edinburgh. (a) First Term: Selections 1 to 30; (b) Second Term: Selection 31 to 60, together with the following: Íslendinga Pættir (ed. by Porleiful Jónsson, Rvík 1904): (1) Ívars Þáttr Ingimundarsonar. (2) Pórarins Þáttr Nefjolfssonar. (3) Porleifs Þáttr jarlsskálds. Three hours a week.
- 5, 6. AUTHORS. With grammar in conjunction. (a) Gunnlaugs Saga, Ormstungu. (b) Saemundar Edda (F. J<sup>6</sup>nsson), pp. 87-107. Four hours a week.
- 7, 8. AUTHORS. With grammar in conjunction. (a) Saemundar Edda (F. Jónsson), pp. 1-58, 137-160, 169-173. (b) History of Icelandic literature (F. Jónsson, pp. 69-91. Four hours a week.

#### RELIGIOUS EDUCATION

Instruction in Religious Education is provided only in the affiliated Colleges.

P.ELIGIOUS EDUCATION (Psychology and Methods)—Courses 1, 2.

N.B.—for key to system of numbering courses, see page 4.

1. THE PSYCHOLOGY OF RELIGIOUS EDUCATION. The course is a study of the psychological principles underlying the religious life of childhood and

adolescence, and a survey of the leading facts concerning morals, manners, and religion of childhood and youth. Four hours a week. Texts: Norsworthy and Whitley, Psychology of Childhood; Tracy, The Psychology of Adolescence; Horne, The Psychological Principles of Education.

- 2. Curricula and Teacher Training. This course deals with the history of the curriculum; the principles determining the selection of materials; the methods of grading and organizing materials; the principles involved in the teaching process; present tendencies in teacher training; the examination of current curricula. Four hours a week. Texts: Betts, The Curriculum of Religious Education; Betts and Hawthorne. Method in Teaching Religion; Bower, The Curriculum of Religious Education; Sharp, Aims and Methods in Teaching Religion; McMahon, Some Methods in Teaching Religion.
- 3. PHILOSOPHY AND PRINCIPLES. This course deals with the fundamental presuppositions and principles of religious education; psychological and social factors conditioning religious growth and development; functions of family, church and state in religious education. Four hours a week, Texts: Horne, The Philosophy of Education; Soares, The Principles of Religious Education; Shields, Philosophy of Education.
- 4. THE HISTORY OF EDUCATION. This course gives a survey of the development of educational practice and theory beginning with the Hebrew and extending to our own times; the lives and ideals of the great educational reformers; the great catechisms; the beginnings of the Sunday School movement; modern movements in religious education. Four hours a week. Texts: Cubberley, A Brief History of Education; Brown, A History of Education in Recent Times; McCormick, A History of Education.

# PHILOSOPHIE LATINE LATIN PHILOSOPHY

N.B.—Pour l'interpretation des chiffres designant les cours, voir la clef, page 4. N.B.—For key to system of numbering courses, see page 4.

# TROISIÈME ET QUATRIÈME ANNÉES THIRD AND FOURTH YEARS

1934-35 et tous les deux ans alternativement. 1934-35 and every alternative year.

1, 2. PHILOSOPHIA SCHOLASTICA. Premier terme, First term: Logica, Moralis la pars. Second terme, Second term: Moralis 2a et 3a pars, Theodicea. Six heures par semaine. Six hours a week. Auteur, Text: A. Lortie, Elementa Philosophiae Christianae, Tomus III, (Action Sociale, Québec, 1929).

Références: Gilson, Le Thomisme, vol. I (Vrin, Paris, 1927), A. D. Sertillanges, S. Thomas, vol. II (Alcan, Paris, 1925), Cardinal Mercier, Traité Elémentaire de Philosophie, vol. II (Louvain, 1926), S. Gillet, La morale et les morales, vol. I (Desclée, Paris, 1925), A. Valensin, Traité de droit naturel, vol. II (Spes, Paris, 1925).

- References: G. Hayward Joyce, The Principles of Logic (Longmans, London, 1920), R. F. Clarke, Logic (Longmans, London, 1921), P. Coffee, The Science of Logic (Longmans, London, 1918), P. Coffee, Epistemology, vol. II (Longmans, London, 1917), J. Hickey, Logica (Herder, 1925).
- 3, 4. EDUCATION RELIGIEUSE. L. Riboulet, Psychologie appliquée a l'Éducation (Vitte, Paris). Une heure par semaine.
- 3a, 4a. RELIGIOUS EDUCATION. E. Shields, Philosophy of Education, vol. I (Catholic Education Press, Washington, 1921). One hour a week.
- 5, 6. HISTOIRE DE LA PHILOSOPHIE. D. Barbedette, Histoire de la Philosophie (Berche, Paris, 1929), pages 336-573. Premier terme: Philosophie moderne, 17e siècle. Second terme: 18e et 19e siècles. Une heure par semaine.
- 5a, 6a. HISTORY OF PHILOSOPHY. Turner, History of Philosophy (Ginn, London, 1903), pages 324-660. First term: Third period of Scholastic Philosophy, Modern Philosophy to Kant. Second term: From Kant to our time. One hour a week.
- 7, 8. CHIMIE. Principes élémentaires: éléments et composés; lois des combinaisons; atomes et molécules; acides, bases, sels; propriétés des éléments les plus connus et deleurs principaux composés; principes de l'analyse chimique des sels; introduction à la chimie organique. Quatre heures par semaine. Auteur: Bazin, Chimie Générale.
- 7a, 8a. CHEMISTRY. Fundamental principles of Chemistry; elements and compounds; laws of combination; atoms and molecules; acids; bases, salts; introduction to organic chemistry. Four hours a week. Text Book: McPherson and Henderson, Henderson and Parker, An Introduction to Analytical Chemistry.
- 9, 10. Manipulations Chimiques. Expériences illustrant les principes étudiés pendant les cours. Trois heures par semaine.
- 9a, 10a. Practical Chemistry. Experiments illustrating general principles and the preparation and properties of substances studied in lectures. Three hours a week.
- 11. ZOOLOGIE. Dalbis, Anatomie et Physiologie animales. Deux heures par semaine.
  - 11a. Zoology. Hegner, College Zoology. Two hours a week.
- 12. MANIPULATIONS BIOLOGIQUES. Série d'expériences illustrant la théorie avec une introduction aux méthodes zoologiques. Deux heures par scmaine. Auteur: Chaine.
- 12a. Practical Zoology. A course of Laboratory work to accompany the foregoing, providing an introduction to zoological methods. Two hours a week. Text book: Marshall, The Frog.
- 13. Anatomie et Physiologie Humaines. Squelette, Os, Tissus, Respiration, Nutrition, Digestion, Circulation, Excrétion, Système nerveux et Organes des sens. Deux heures par semaine.
- 13a. Human Anatomy and Physiology. Skeleton, Bones, Tissues, Respiration, Nutrition, Digestion, Circulation, Excretion, Nervous System and Sense organs. Two hours a week.

Troisième et Quatrième années, Arts: Philosophie latine (élèves de langue française): Cours 1, 2; 3, 4; 5, 6; 7, 8; 9, 10; 11; 12; 13.

Third and Fourth Years, Arts: Latin Philosophy (English-Speaking students): Courses 1, 2; 3a, 4a; 5a, 6a; 7a, 8a; 9a, 10a; 11a; 12a; 13a.

1933-1934 et tous les deux ans alternativement. 1933-1934 and every alternate year.

1, 2. PHILOSOPHIA SCHOLASTICA. Premier terme, First term: Ontologia, Cosmologia. Second terme, Second term: Psychologia. Six heures par semaine. Six hours a week. Auteur, Text: A. Lortie, Elementa Philosophiae Christianae, Tomi I et II (Action Sociale, Québec, 1929).

Références: A. Eymieu, Le Gouvernement de soi-même, vol. I (Perrin, Paris, 1928), Cardinal Mercier, Psychologie, vol. I (Louvain, 1923), H. de Tourville, Précis de Psychologie fondamentale (Bloud, Paris, 1928), C. Lahr, Manuel de Philosophie (Beauchesne, Paris, 1924).

References: J. Hickey, Ontologia (Herder, 1925), P. Coffee, Ontology (Longmans, London, 1926), J. McWilliams, Cosmology (MacMillan, 1928), Cardinal Mercier, Modern Scholastic Philosophy (Herder, 1923), J. Hickey, Psychologia (Herder, 1925), M. Maher, Psychology (Longmans, London, 1923).

- 3, 4. EDUCATION RELIGIEUSE. L. Riboulet, Histoire de la Pédagogie (Vitte, Paris). Une heure par semaine.
- 3a, 4a. Religious Education. P. MacCormack, History of Education (Catholic Education Press, Washington, 1915). One hour a week.
- 5, 6. HISTOIRE DE LA PHILOSOPHIE. D. Barbedette, Histoire de la Philosophie (Berche, Paris, 1929) pages 1-336. Premier terme: Philosophie orientale, grecque, gréco-romano-orientale, patristique. Second terme: Philosophie byzantine, arabe, juive, scolastique. Une heure par semaine.
- 5a, 6a. HISTORY OF PHILOSOPHY. Turner, History of Philosophy (Ginn, London, 1903) pages 1-323. First term: Oriental, Pre-Socratic, Socratic and Aristotelian Philosophy. Second term: Post-Aristotelian, Greco-Oriental, Patristic and Scholastic Philosophy. One hour a week.
- 7, 8. PHYSIQUE. Premier terme: Notions de Mécanique, Hydrostatique, Pesanteur, Chaleur. Second terme: Acoustique. Optique, Electricité et Magnétisme. Quatre heures par semaine. Auteur: Leday, Manuel de Physique.
- 7a, 8a. Physics. First term: Statics, Hydrostatics, Heat. Second term: Sound, Light, Electricity and Magnetism. Four hours a week. Text book: Goodspeed, Principles of Physics.
- 9, 10. Physique Experimentale. Les élèves font une série d'expériences dans le but d'illustrer les principes étudiés pendant les cours. Deux heures par semaine. Auteur: Noble, Manipulations physiques.
- 9a, 10a. GENERAL PHYSICS (PRACTICAL). The students perform a series of experiments to illustrate the theoretical principles studied in the lectures. Two hours a week. Text book:Milliken, Gale and Bishop.
  - 11, 12. BOTANIQUE. Dalbis, Anatomie et physiologie végétales.

- 11a, 12a. BOTANY. Division of Sciences. Comparison of living and non-living beings; differences between animals and plants, plants and minerals. Classification of plants. Cells, tissues, seeds, roots, stems (primary and secondary growth). Buds, leaves, flowers, fruits. Types of Cryptogams. Two hours a week. Text book: Andrews, Practical Course in Botany.
- 13, 14. LABORATOIRE, BOTANIQUE GENERALE. Deux heures par semaine. Dalbis, Exercices pratiques de Botanique.
- 13a, 14a. Laboratory Course in General Botany. Two hours a week. Pepoon, Studies in Plant Life.
- 15, 16. ASTRONOMIE. La terre et ses mouvements, le soleil, la lune, les planètes, les comètes, les étoiles, les nébuleuses, coordonnées célestes, hypothèses cosmogoniques. Deux heures par semaine. Auteur: Moreux, Cosmographie.
- 15a, 16a. ASTRONOMY. The earth and its motions, the sun, the moon, the planets, comets, stars and nebulae, celestial co-ordinates, cosmogonic hypotheses. Two hours a week. Text book: Young, Elements of Astronomy.

Troisième et Quatrième années, Arts: Philosophie Latine (élèves de langue française): Cours 1,2; 3, 4; 5, 6; 7,8; 9, 10; 11, 12; 13, 14; 15, 16.

Third and Fourth Year, Arts: Latin Philosophy (English-speaking students): Courses 1, 2; 3a, 4a; 5a, 6a; 7a, 8a; 9a, 10a; 11a, 12a; 13a, 14a; 15a, 16a.

Students in St. Boniface College proceeding to the Course in Latin Philosophy will take the following course in the First and Second Years.

# DEUXIÈME ANNÉE

(Pour les élèves de langue française. Tous les sujets sant obligatoires; il n'y a pas de sujets facultatifs.)

#### Français

Composition et Préceptes Littéraires.—Rédaction au cours de chaque terme de quatre compositions formant un total minimum de 2,000 mots.

Préceptes—premier terme. L'art dramatique; historique du drame; la tragédie grecque, son évolution; la tragédie cornélienne; le système dramatique de Shakespeare; les prétentions du théâtre de Voltaire; la conception romantique d'après Hernani et Ruy Blas; le drame moderne; Bornier, Le Fille de Roland; Rostand, L'Aiglon; Coppée, Pour la Couronne; le renouveau du théâtre chrétien; Ghéon, Les Trois Sagesses du vieux Wang.

Manuels et livres de références. Verest, Manuel de littérature; Faguet, Drame ancien, drame moderne; Lemaître, Impressions de théâtre; Brunetière; Les Epoques du théâtre français. Notes du professeur.

Préceptes—deuxième terme. L'éloquence: Formation de l'orateur; dialectique oratoire; pathétique: et traité des passions; tempéraments oratoires; structure du discours; la débit, diction et action; l'âme dans la voix et dans le geste; étude de l'appareil expressif; genres oratoires; éloquence sacrée; éloquence profane, politique, judiciaire, d'apparat.

Manuels et livres de références. Longhaye, Théorie des Belles-Lettres;

Verest, Manuel de littérature; Legouvé, La lecture en action; Damien, Le geste; Dion, Poétique et Rhétorique; Rondelet, L'art de parler; Monsabré, La prédication.

HISTOIRE DE LA LITTERATURE ET AUTEURS FRANCAIS. Premier terme. Bourdaloue, Bossuet, Massillon, D'Alembert, Diderot, Marivaux, Beaumarchais, Fontenelle, Lesage, Vauvenargues, Montesquieu, Voltaire, Buffon, Jean-Jacques Rousseau, Joseph de Maistre, Madame de Staël, Chateaubriand. Extraits et analyses des auteurs ci-devant mentionnés.

Deuxième terme. Le mouvement romantique: Hugo, Musset, George Sand, Stendhal, Balzac, Thierry, Michelet. Le Naturalisme: Leconte de Lisle, Sully Prud'homme, Coppée, Augier, Dumas (fils), Flaubert, Renan, Taine, Sainte-Beuve, Veuillot, Verlaine, Mallarmé. Les Contemporains: Brunetière, France, Faguet, Bourget, de Vogué, Lemaître, Barrès, Bordeaux, Bazin, Benjamin, Brieux. Extraits et analyses des auteurs ci-devant mentionnés.

Manuels et livres de références: Faivre, Histoire de la littérature et analyse des auteurs; Mouchard, Histoire de la littérature; Lanson, Histoire de la littérature; Calvet, Histoire illustrée de la littérature; Desgranges, Histoire illustrée de la littérature française au XIXe siècle; Doumic, Tableau de la littérature. Procès, tomes II, III, IV, Morceaux choisis; Calvet, Morceaux choisis; Desgranges, Auteurs française; Vianey, Explication française; Voltaire, Oeuvres choisies (Flandrin); Montesquieu, Oeuvres choisies (Roustan); Rousseau, Oeuvres choisies (Marnet); Balzac, Oeuvres choisies (Merlant); Chateaubriand, Oeuvres choisies (Florisoone).

Lectures: Outre les ouvrages déjà mentionnés les élèves devront lire les livres, suivants, et en rédiger une appréciation: Baumann, Bossuet; Souvestre, Un philosophe sous les toits; Valsayre, O'Connell, Lecigne, Joseph de Maistre, Louis Veuillot; Musset, Fantasio; Rostand, Cyrano de Bergerac, l'Aiglon; Bazin, La Barrière; Bordeaux, La peur de vivre; Barrès, Colette Baudoche.

# Latin

THEMES LATINS ET VERSIONS. Mouchard, Thèmes latins. Aussi, thèmes rédigés d'après les auteurs latins au programme. Ragon, Centvingt versions latines.

AUTEURS. Premier Terme—Cicéron, Pro Archia. Horace, Epitres. Second terme—Cicéron, Pro Milone; Horace, Satires.

# Grec

Grammaire et Themes Grecs. Revue de la morphologie et de la syntaxe. Ragon, Thèmes sur la syntaxe. Thèmes rédigés d'aprés les auteur grecs au programme. Ragon, Deux cent versions grecques.

AUTEURS. Premier terme—Démosthène, Ière Philippique; Homère, Iliade, Chant VIe, 1e partie. Second terme—Démosthène, Ile Olynthienne; Homère, Iliade, Chant VIe, IIe partie.

# Anglais

# 1934-1935 et tous les deux ans alternativement.

Composition Anglais. Premier terme—Memory work, exercises in vocabulary, pronunciation and translation. Text: Gibb-Roulier-Stryienski, Cours de thèmes anglais (Paris, Didier, 1928). The sentence, the paragraph,

narration, precepts, imitation work and analysis of models. Text: Model English I, Donnelly (Allyn & Bacon).

Second Terme—Description and essay; precepts, imitation and analysis of models, Donnelly, pp. 123-189.

HISTOIRE DE LA LITTERATURE ANGLAISE. Premier Terme—Early English Period, Elizabethan Literature, Civil War Period; Chaucer, More, Spenser, Southwell, Shakespeare, Jonson, Milton, Dryden, Bunyan.

Second Terme—Eighteenth Century Literature. I. The Period of Classicists; Pope, Swift, Addison, Steele, Johnson, Burke, Gibbon. II. The Romantic Movement: James Thomson, Collins, Young, Gray, Goldsmith, Burns, Cowper. III. The First English Novelists: History of the Novel, Defoe. Text: Handbook of Literature, Jenkins (John Murphy, New York).

AUTEURS. Premier Terme—Spenser: Extracts from the Fairie Queene; Sonnet XXVI, LXXIX. Southwell: Dangers of Delay; Times Go By Turns; Scorn Not The Least; The Burning Babe. Shakespeare: Richard III, Act I, Scene IV; King John, Act IV, Scene I; Henry VIII, Act III, Scene II, and Act IV, Scene II. Milton: Extracts from Paradise Lost; Debate in Pandemonium, Address to Light, Satan's Soliloquy on Viewing Paradise at a Distance; Ode, On the Morning of Christ's Nativity. Dryden: Alexander's Feast. Short selections from the other authors studied. Detailed study of the following: Shakespeare, Macbeth; Macaulay, Essay on Addison.

Second Terme—Pope: Ode on Solitude; Extracts from Essay on Criticism. Thomson: Winter, Castle of Indolence, Ode to Evening. Gray: Elegy Written in a Country Churchyard. Cowper: On the Receipt of My Mother's Picture. Addison: The Vision of Mirza. Steele: Story-Telling. Swift: Verses on His Own Death. Short Selections from the other authors studied. Detailed study of the following: Addison: Select Essays. Goldsmith: The Deserted Village, The Traveller, The Good-Natured Man, She Stoops to Conquer.

# Anglais

## 1933-1934 et tous les deux ans alternativement.

Composition anglais. Premier Terme—Memory work, exercises in vocabulary, translation. Text: Gibb-Roulier-Stryienski, Cours de thèmes anglais (Didier). Qualities of style, processes of composition. Text: Model English II, Donnelly (Allyn & Bacon).

Second Terme—Memory work, exercises in vocabulary and pronunciation, exercises in translation. Text: Gibb-Roulier-Stryienski, Cours de thèmes anglais (Didier). Aids to composition, types of composition. Text: Donnelly, Model English II.

HISTOIRE DE LA LITTERATURE ET AUTEURS. Premier Terme—The Nineteenth Century; The Age of Romanticism; The Victorian Period; Keats, Shelley, Byron, Coleridge, Scott, Lamb, Southey, Wordsworth, Moore, Mrs. Browning, Rossetti, Browning, Lingard, De Quincey, Faber. Text: Handbook of Literature, Jenkins (John Murphy, New York). References: Long, English Literature; Sherman, English Literature (American Book Co.).

AUTHORS. Keats, Ode on a Grecian Urn, To Autumn; Shelley, The Cloud; Byron, Apostrophe to the Ocean, Saint Peter at Rome; Coleridge, Selections from the Ancient Mariner and Kubla Khan; Scott, Ivanhoe; Lamb, Tales from Shakespeare; Southey, The Inchcape Rock; Wordsworth, The

Virgin, The Daffodils. Short selections from the other authors studied. Detailed study of the following: Selections from Wordsworth and Tennyson.

Second Terme—Thackeray, Wiseman, Dickens, Eliot, Carlyle, Arnold, Tennyson, Patmore, Francis Thompson, Swinburne, Newman, Manning, Stevenson, Ruskin, Meredith, Hardy, Barrie, Chesterton, Kipling; also Franklin, Poe, Bryant, Longfellow, Whittier, Cooper, Webster, Irving, Hawthorne, Holmes.

AUTHORS—Wiseman, Fabiola; Dickens, Oliver Twist; Tennyson, Crossing the Bar, The Bugle Song, Next of Kin, The Summer Is Ended; Patmore, The Toys; Thompson, Ex Ore Infantium, Daisy; Newman, Selections; Stevenson, Treasure Island, Dr. Jekyll and Mr. Hyde; Poe, The Haunted Palace, The Raven; Longfellow, The Psalm of Life; Cooper, The Last of the Mohicans; Irving, The Sketch Book. Detailed study of the following: Newman, Second Spring and selections (Merrill, New York); Eliot, Silas Marner.

N.B.—Tout l'enseignement se donne dans la langue anglaise et les élèves sont tenus de ne se servir que de cette langue en classe. Une importance primordiale est attachée à l'accentuation et à la pureté de la prononciation dans les lectures à haute voix et les répétitions.

#### Histoire

1934-1935 et tous les deux ans alternativement.

HISTOIRE CONTEMPORAINE (1789 à nos jours):

Premier Terme—La Révolution française; le Consulat et l'Empire; la Restauration; la Monarchie de Juillet; La République de 1848.

Deuxième Terme—Le Second Empire; la Troisième République; l'Europe après 1870; l'Europe de 1900 à nos jours; la Guerre Européenne.

Manuels et livres de références: Jules Uny, l'Epoque contemporaine; de la Gorce, Histoire religieuse de la Révolution Française; Vandal, l'Avènement de Bonaparte; A Mallet, XIXème siècle; Jacques Bainville, Histoire de France; de la Gorce, Histoire du Second Empire; Louis Madelin, La France de l'Empire; R. Poincaré, La Guerre de 1914; G. Mangin, Comment finit la guerre; G. Hanotaux, La Troisième République.

1933-1934 et tous les deux ans alternativement.

HISTOIRE DU CANADA. Premier Terme—Découverte de l'Amérique; domination française. Second Terme—Domination anglaise; histoire politique, militaire et religieuse.

Manuels et livres de références: Rutché et Forget, Précis d'histoire du Canada; Desrosiers et Bertrand, Histoire du Canada; Hopkins, Histoire populaire du Canada (traduction de Benjamin Sulte); Ferland, Histoire du Canada; Groulx, La Naissance d'une race, Lendemain de conquête; Vers l'Emancipation; Chapais, Cours d'histoire du Canada (3 vols.); Collections, "The Makers of Canada," "Canada and its Provinces."

#### Mathématiques

1933-1934 et tous les deux ans alternativement.

Practical Trigonometry; Playne and Fawdry, voir cours, 5, 6; page 76. 1934-1935 et tous les deux ans alternativement.

Wilson and Warren, College Algebra; Crawley and Evans, Analytical Geometry. Voir cours 1, 2, 3, 4; page 76.

# PREMIÈRE ANNÉE

(Pour les élèves de langue française. Tous les sujets sont obligatoires; il n'y a pas de sujets facultatifs.)

# Français

COMPOSITION ET PRECEPTES LITTERAIRES. Redaction au cours de chaque terme de quatre compositions formant un total minimum de 2000 mots.

Préceptes-Premier Terme. L'art de la composition; l'invention; la stérilité littéraire; les topiques; la disposition; notions d'ordre et de choix; la description; genéralités; observation directe et indirecte, sa place dans une oeuvre; modèles: Homère, Châteaubriand, Lafontaine, Hugo, Flaubert, Leconte de Lisle, La Bruyère; La narration; géneralité; genres, Vraisemblance dans l'ensemble et dans le détail; l'art de la narration chez Lafontaine, sa supéricrité sur Esope et Phèdre; La verité des caractères; grandes lois; procédés des grand maîtres. Etude des narrations suivantes; Daudet, Le mauvais zouave, L'enfant espion; La chèvre de Monsieur Séguin, Les petits pâtés, La vision du juge de Colmar; Maupassant, Une vendetta, L'aventure de Walter Schnaffs, La parure, La ficelle, En mer, Le Loup, Les prisonniers; Bazin Le départ d'André Lumineau (La terre qui meurt); Feuillet, La Barque (Histoire de Sibylle); Voltaire, L'art de se choisir un ministre (Zadig); F. M. Victorin, Peuple sans histoire; Mme. J. Lavergne, Pierrot fugitif. La dissertation; étude d'un extrait de I. Veuillot dans Ça et Là. La critique; l'évolution de la critique littéraire; le bon goût; les classiques; règles pratiques de critique littéraire. Notion de psychologie littéraire; analyse des facultés mentales, de l'émotion esthétique; le rire. La parole et la livre.

Manuels et livres de références: Verest, Manuel de littérature; Longhaye, Théorie des Belles-Lettres; Vincent, Théorie de la composition littéraire; Lanson, Conseils sur l'art d'écrire; Albalat, L'art d'écrire en 20 leçons, Le travail du style, La formation du style; Roustan, La narration. Notes du professeur.

Prèceptes—Deuxième Terme: Les genres littéraires et leur évolution: la lettre; analyse des modèles—Veuillot, De Maistre, Mme. de Sévigné; genre didactique; littérature scientifique et historique. Notion d'esthétique; les Beaux-Arts; la poésie et son objet; poésie épique; le roman; poésie lyrique; les âges lyriques; l'ode et l'élégie moderne avec Chénier, Hugo, Lamartine, Musset, Vigny.

Manuels et livres références: Verest, Manuel de littérature; Longhaye, Théorie des Belles-Lettres; Lacouture, L'esthétique fondamentale; Vincent, Les genres littéraires; Lammenais, De l'art et du beau.

HISTOIRE DE LA LITTERATURE ET AUTEURS FRANCAIS. Premier Terme—Origine et premiers développements de la langue française; le Moyen âge; chansons de geste, la Chanson de Roland; romans allégoriques; fabliaux; poésie dramatique; poésie lyrique; l'histoire, Villehardouin, Joinville, Froissart, Commines; la Renaissance, Marot, Ronsard et la Pléiade, du Bellay; le théâtre; Jodelle et Garnier; Rabelais, Saint François de Sales, Montaigne; la Satire Ménippée; Régnier et Malherbe. Extraits et analyses des auteurs ci-devant mentionnés.

Deuxième Terme—Le XVIIe siècle, D'Urfé, L'Hôtel de Rambouillet, L'Académie française, Port-Royal, Descartes, Balzac, Voiture, Madeleine de Scudéry, Rotrou, Corneille, Racine, Molière, La Fontaine, Boileau, Pascal, La Rochefoucauld, La Bruyère, Fénelon; la querelle des Anciens, et des Modernes. Extraits de analyses des auteurs ci-devant mentionnés.

Manuels et livres références: Faivre, Histoire de la littérature et analyses des auteurs; Mouchard, Histoire de la littérature; Lanson, Histoire de la littérature; Des Granges, Histoire illustrée de la littérature; Calvet, Histoire de la littérature; Parvillez et Moncarey, La Littérature française; Faguet, XVIe siècle, XVIIe siècle; Doumic, Histoire de la littérature; Procés, Morceaux choisis, tome III; Des Granges, La littérature française (Analyses); Morceaux choisis: Oeuvres choisies de Corneille (Rocheblave); Oeuvres choisies de Racine (Fourcassié); Oeuvres choisies de Molière (Des Granges); Oeuvres choisies de la Bruyère (Cayrou); Oeuvres choisies de La Fontaine (Le Bidois); Oeuvres choisies de Boileau (Géruzez).

N.B.—Les élèves devront, en plus des extraits et pièces analysés en classe, lire les grandes pièces classique du XVIIe siècle et en rédiger une appréciation.

#### Latin

Grammaire et Themes Latins. Revue générale de la grammaire latine. Ragon, Exercices latins sur la syntax. Mouchard, Thèmes latins. Thèmes rédigés d'après les auteurs latins au programme. Ragon cent vingt versions latins.

AUTEURS. Premier Terme—Cicéron, De Senectute; Virgile, Enéide, chante VIe, première moitié. Second Terme—Virgile, Enéide, Chant VIe, seconde moitié; Cicéron, Pro Marcello; Horace, Odes choisies.

#### Grec

Grammaire et Themes Grec. Revue de la morphologie et de la syntaxe. Ragon, Thèmes sur la syntaxe. Thèmes rédigés d'aprés les auteurs grecs au programme. Ragon, Deux cents versions grecques.

AUTEURS. Premier Terme—Platon, Criton; Homère, Iliade, Chant VIe, 1ère partie. Second Terme—Homère, Iliade, Chant VIe, 2e partie; Démosthène, IIe Olynthienne.

#### Anglais

(Voir le programme de la deuxième année.)

#### Histoire

(Voir le programme de la deuxième année.)

Mathematiques

(Voir le programme de la deuxième année.)

#### FIRST AND SECOND YEARS

(For English-speaking students. All the subjects are required; none are optional.)

The outline of the subjects for the First and Second Years in Arts in the Latin Philosophy Course, for English-speaking students, is for the present withdrawn from publication, but will be prepared and issued for the session 1933-1934 if any students are admitted to classes in these subjects by St. Boniface College.

### **CURRICULA IN PHARMACY**

#### **DIPLOMA IN PHARMACY**

The University of Manitoba entered into an arrangement with the Pharmaceutical Association of Manitoba in 1914 whereby the work of instruction in Pharmacy of students desiring to qualify as licensed Pharmaceutical Chemists in Manitoba (formerly carried on by the Association in its own College, known as the Manitoba College of Pharmacy) was undertaken by the University. The Association continues to prescribe the preliminary educational qualifications, the conditions of apprenticeship and practical training, admission fees, etc., and issues the license, the University being responsible only for the work of instruction and examination. Similarly, the Association determines the value of all professional certificates or other like credentials from other associations or institutions, and reports to the University the credit to be given in the course for the Diploma in Pharmacy. An applicant for registration as a Certified Apprentice shall produce evidence that he has passed the Matriculation Examination for Arts and Science of the University of Manitoba or an examination reasonably equivalent thereto clear of all Intending students must have the period of apprenticeship certified on special forms obtainable on request from the Registrar of the Pharmaceutical Association, and these certificates are to be returned to him not later than August 15th of the year in which the student intends to enter the University course in Pharmacy. A certificate from the Registrar of the Pharmaceutical Association to the effect that the Association's requirements with respect to preliminary education, apprenticeship, etc., have been met must be presented to the Registrar of the University at the time of registration or in advance.

The course covers two academic years, as follows:

#### First Year

	Fall Term		Spring Term	
Course Page Nos. SUBJECT		hours	Lecture hours per week	hours
1, 2, 3, 4 49-50 Chemistry	3	3	3	3
1, 2; 3; 5, 6 112 Pharmacy	5	4	3	4
7, 8; 9, 10 112 Materia Medica	3	2	2	2
11, 12 112 Prescriptions	2		2	
1, 2; 3, 4 46-47 Botany	2	2	2	2
10 69 Mineralogy		-	2	
Second Y	ear			
13, 14; 15, 16 113 Pharmaceutical Chemistry	4	6	4	6
17, 18; 19, 20 113 Materia Medica	2	3	2	3
1, 2; 3, 4 85 Physics	3	2	3	2
5a, 6a 112 Pharmacy		4		4

Owing to the limited laboratory space available for the work of the Department of Pharmacy, it will be necessary to restrict the registration in the First Year of the Diploma Course for the session 1933-1934 to at most twenty-four students. Applications will be received up to August 1st and should be on a form provided by the Registrar of the University, obtainable on request.

The following excerpts from the "Manitoba Pharmaceutical Act" touching the matters of preliminary educational qualification, conditions of apprenticeship, etc., are appended:

#### THE PHARMACEUTICAL ACT

#### (4 Geo. V., Cap. 78, 1914)

- 15. (1) Before any candidate shall be entitled to be registered as a certified apprentice he shall:
  - (a) produce to the council satisfactory evidence of a good moral character;
- (b) pass such examination or examinations as the council shall have prescribed or shall prescribe, or produce to the council satisfactory evidence of requisite knowledge.
- (2) No person shall be competent to be registered as a certified apprentice unless he shall have attained the age of at least sixteen years.
- 16. Before any candidate shall be entitled to be registered as a certified clerk he shall:
- (a) produce to the council satisfactory evidence that he has actually served as a certified apprentice for at least two years to a licensed pharmaceutical chemist who has during such period been engaged in actual practice as a compounder of physicians' prescriptions;
- (b) pass such examination (to be called the "minor examination") as the council shall have prescribed or shall prescribe, or produce to the council other satisfactory evidence of requisite knowledge and experience.
- (2) No person shall be competent to be registered as a certified clerk unless he shall have attained the age of at least eighteen years.
- 17. Before any candidate shall be entitled to be rgistered as a licentiate pharmaceutical chemist he shall:
- (a) produce to the council satisfactory evidence that he has served at least two years as a certified clerk or at least four years as a certified apprentice to a licensed pharmaceutical chemist who has been during such periods respectively in actual practice as a compounder of physicians' prescriptions, and has attended such course of instruction as the council shall prescribe; time spent in attendance on a regular course of lectures and instruction in any college or school of pharmacy recognized and approved by the council shall be considered part of such periods of service respectively;
- (b) produce to the council satisfactory evidence that he has passed the mithor examination:
- (c) pass such examination (to be called the "major examination") as the council shall have prescribed, or shall prescribe, or produce to the council other satisfactory evidence of requisite knowledge and experience.
- (2) No person shall be registered as a pharmaceutical chemist who has not attained the age of twenty-one years.
- 19. The council may in its discretion accept the diploma or other authenticated certificate of examination of any other competent examining board out of the Province of Manitoba, or of the University of Manitoba, as sufficient evidence of qualification of any applicants to be registered under this Act as certified apprentice, certified clerk or pharmaceutical chemist respectively.

### DEGREE IN PHARMACY

#### BACHELOR OF SCIENCE IN PHARMACY

The University of Manitoba confers the degree of Bachelor of Science in Pharmacy. The following are the requisites for proceeding in course to this degree.

#### Matriculation

The requirements for Matriculation are the same as for Matriculation for Arts or Science.

#### First Year

			Fall	Term	Spring	g Term
			Lecture	Lab.	Lecture	Lab.
Course	Page	SUBJECT	hours	200000	hours	hours
Nos.	1 age	SOBJECT		per week	per week	
1, 2		English	per week	per week	per week	per week
1, 2; 3, 4		Mathematics	- 6	-	6	
			3	2	3	2
1, 2; 3, 4		Physics		3	2	3
3, 4; 5, 6				3	3	3
1, 2; 3, 4	dairy.	French or		rudā nic	break Paper	erani la
1, 2 or 5, 6, 7,	8	German	3	VIII (-13 6)	3	elspie dis
		Second	Year*			
		Water Company of the Contract				
1, 5, 16: 7, 8		Chemistry	. 2	6	2	6
10		Mineralogy			2	ANGEL THERE
1, 2; 3, 4		Botany		2	2	2
1, 2; 3; 5, 6		Pharmacy		4	3	4
7, 8; 9, 10		Materia Medica		2	2	2
11, 12		Prescriptions	2		2	
11, 12		Trescriptions			and a line of	
		A TOTAL OF THE PARTY OF THE PAR				
		Third Y	ear*			
21, 22; 23, 24		Chemistry	. 2	. 3	2	3
9, 10; 11, 12		Zoology		3 .	3	3
13, 14; 15, 16		Pharmaceutical Chemistry		6	4	6
17, 18; 19, 20		Materia Medica	. 2	3	2	3
5a, 6a		Pharmacy		4	-	4
		Fourth	Year			
21, 22; 23, 24		Pharmaceutical Chemistry	. 2	6	2	6
25, 26; 27, 28		Phytochemistry		6	2	6
31, 32; 39, 40		Chemistry		6	2	6
01, 02, 00, 10						

<sup>\*</sup>The same periods of apprenticeship, certified to by the Registrar of the Manitoba Pharmaceutical Association, are required for admission to the Second and Third Years of this course as are required for admission to the First and Second Years respectively of the Diploma Course. This requirement is imposed in conformity with the Pharmaceutical Association Act. (See page 110.)

# COURSES IN PHARMACY IN DETAIL

# DEPARTMENT OF PHARMACY AND PHARMACEUTICAL CHEMISTRY

Henry E. Bletcher, B.Sc., F.C.I.C.

Dugald McDougall, M.Sc., F.C.I.C.

Assistant Professor

N.B.-for key to system of numbering courses, see page 4.

- 1, 2. Pharmacy. First Term—An exposition of the principles on which pharmaceutical operations are based; the utilization of those processes for specific ends; the historical development of pharmacy. Second Term—An extended consideration of the galenical preparations of the British Pharmacopoeia; the comparison of other important national pharmacopoeias with the British Pharmacopoeia. Three hours a week. Text books and books of reference: British Pharmacopoeia, British Pharmaceutical Codex, Remington's Practice of Pharmacy.
  - 3. THE ARITHMETIC OF PHARMACY. Two hours a week, first term.
- 5, 6. Practical Pharmacy. This course includes practice in the physical operations used in pharmacy, such as determination of weight, volume, temperature, specific gravity, melting point, boiling point, etc.; the study of simple heat phenomena; simple heat processes; filtration, evaporation, crystallization, etc.; distillation; dispensing of classes of preparations commonly prescribed by physicians; dispensing of difficult prescriptions; care of apparatus; methods of work. Fours hours a week.
  - 5a, 6a. A continuation of course 5, 6.
- 7, 8. MATERIA MEDICA. The detailed study of organic drugs, particularly those of the British Pharmacopoeia, the principal facts relating to their sources, preparation, identification, characteristics, purity, constituents and toxicology. The chief anatomical features and the main physiological processes of the animal body. The pharmacology of the more important drugs. Three hours a week. Greenish: Materia Medica; Mansfield: Materia Medica and Pharmacognosy.
- 9, 10. Practical Materia Medica. A laboratory course to accompany 7, 8. A number of drugs will be carefully studied by means of selected specimens showing the characteristic by which the drug is identified. The histological structure of medicinal plants; the study by means of the microscope of powdered drugs and the detection of impurities in them. Two hours a week.
- 11, 12. Prescriptions. This course includes the Latin of pharmacy posology, prescription arithmetic, methods of compounding prescriptions, the recognition and treatment of incompatibilities, the Pharmaceutical Act and other legislation affecting the practice of pharmacy, and all other topics of the Diploma Course in Pharmacy not specifically classified elsewhere. Two hours a week. Muldoon, Pharmaceutical Latin; American Pocket Medical Dictionary.

- 13, 14. PHARMACEUTICAL CHEMISTRY. The application of chemistry to the preparation of medicinal and related substances both inorganic and organic; methods of preparation; characters of pure products; tests. Four hours a week. Bentley and Driver, Pharmaceutical Chemistry; Sadtler-Coblentz-Hostmann, Pharmaceutical and Medical Chemistry; Macbeth, Organic Chemistry; texts and reference works of the Departmental Library.
- 15, 16. Practical Pharmaceutical Chemistry. A laboratory course to accompany 13, 14. Analytical methods. The preparation and purification of typical inorganic and organic chemical substances used as medicines. The manufacture of galenicals. The assay of selected preparations. The study of the more important groups of substances of biochemical origin. The application of chemical methods in the evaluation of organic drugs. Six hours a week.
- 17, 18. MATERIA MEDICA. The study of the chemical nature of important classes of plant constituents, including among others the resins, oleoresins, fatty oils, carbohydrates, volatile oils, glucosides, alkaloids and tannins. The recognition of the natural orders of plants of most importance as source of drugs. Pharmaceutical bacteriology. Biologics. Assigned reading. Reports. Two hours a week.
- 19, 20. Practical Materia Medica. A laboratory course to accompany 17, 18. Three hours a week.
- 21, 22. PHARMACEUTICAL CHEMISTRY. The preparation, characters and medicinal uses of important medicinal substances, especially certain alkaloids, glucosides, resins, synthetics and biologics. Topics relating to pharmaceutical research will be selected for investigation and report. Two hours a week, with assigned reading.
- 23, 24. Practical Pharmaceutical Chemistry. A laboratory course to accompany 21, 22. The identification of medicinal chemicals; detection of impurities; special methods for the determination of poisonous impurities. Determination of the identification values of fixed and volatile oils. A careful study and review of extraction and purification methods suitable for alkaloids, glucosides, and resins. The separation and identification of alkaloids in mixtures. Preparation of certain synthetics. Six hours a week.
- 25, 26. Phytochemistry, with special attention to the medicinal substances contained in plants. Two hours a week, with assigned reading and reports.
- 27, 28. PRACTICAL PHYTOCHEMISTRY. A laboratory course to accompany 25, 26. Six hours a week.

## **GENERAL REGULATIONS**

#### REGISTRATION

New students, whether entering with matriculation or with advanced standing, should present their applications for admission to the Registrar, either in person or by mail, not later than September 1st, and preferably as early as possible in the summer. Provision will be made for the formal registration of First Year students of the Junior Division in Arts and Science in September up to and including September 18th, and their regular lectures will begin on September 19th. A penalty of \$2.00 will be imposed on any First Year student in Arts and Science who presents himself for registration later than September 20th.

Provision will be made in September up to and including September 25th, for registration and payment of fees by students of the Second Year of the Junior Division in Arts and Science. Regular lectures for these classes will open on September 26th. On and after September 26th, a penalty of \$2.00 will be imposed upon those who present themselves to register, pay fees and enter classes.

Students of the Senior Division in Arts and Science will register in September up to and including September 25th, and lectures will open on September 26th. On and after September 26th, a penalty of \$2.00 will be imposed upon those who present themselves to register, pay fees and enter classes.

No registration in Arts and Science will be accepted after Wednesday, October 1st, unless the Board of Studies on investigation finds that a special concession is warranted.

Registration in the Diploma Course in Pharmacy, First and Second Year, takes place on September 18th, and lectures begin on September 19th.

Special students may be registered whose applications have been approved by the Dean of the Faculty concerned and the Board of Studies Committee on Students' Courses.

#### **EXAMINATIONS**

#### General Regulations

- 1. The regular examinations for undergraduates in Arts, Science and Pharmacy are given in part in December and in part in April of each academic year. For definite information as to the work upon which each of these sets of examinations is based, the student is referred to the curricula as set forth elsewhere in this Calendar.
- 2. Examinations in Arts and Science may be held at such outside centres in Manitoba, Saskatchewan, Alberta and British Columbia, as the Board of Studies may from time to time approve, it being understood that this does not apply to practical or oral examinations, where such are required.

#### Matriculation Examinations

Examinations for Matriculation are conducted by the Examination Board of Manitoba (a joint committee of the University Council and the Advisory Board of the Department of Education of Manitoba, appointed to administer the examinations for promotion in and from the secondary schools of the province). They are held twice in each year, in the months of June and September, and Supplemental Examinations are given under certain conditions in December. The September Examination is ordinarily limited to subjects of Grade XI and is intended mainly for those who desire to qualify immediately to enter upon University Courses. For fuller information regarding the Matriculation Examinations, consult the Programme of Studies for Secondary Schools of the Department of Education.

#### CREDIT FOR TERM WORK

- 1. At the close of each term the instructors in Arts and Science in the University and the affiliated colleges may make a report on the work of each student for the term just closing in the form of an award of marks, to be based upon the results of recitations, reports, essays, papers or interim examinations, or a combination of any number or of all of these tests, as indicating the character of the work throughout the term. The maximum credit allowed for term work in such a report shall be 20 per cent. of the total marks allowed for the subject or portion of the subject in question.
- 2. On the acceptance of the report of the instructor, the marks given for term work are added to the marks obtained at the written examination in the subject (for which the minimum shall be 80 per cent. of the total marks allowed for the subject or portion of the subject in question), and this total shall determine the standing of the student.
- 3. In case the instructor submits no report, or his report is not accepted by the Board of Studies for any reason, the standing of the student is determined entirely by the final written examination, which will be valued on the basis of the total marks allowed for the subject or portion of the subject in question.
- 4. In any case, the award of scholarships and medals in Arts and Science is made entirely on the results of the final written and practical examinations.

#### FAILURES AND SUPPLEMENTALS

- 1. When the work in a subject is divided into parts such as the theoretical part and the laboratory part in a science subject or the grammar and prose part and the authors part in a language subject, final credit towards standing for a degree will not be given for any such part or parts of a subject until all have been completed and passed to the satisfaction of the examiners. Provisional credit will not, in the meantime, count towards determining eligibility to proceed with further work in the subject.
- 2. If a student fails to pass in any subject or part of a subject but secures 35 per cent. or over he will have the privilege of repeating the examination in that subject or part of a subject in which he has failed without attendance, but if he obtains less than 35 per cent. he must repeat the

class work of that subject or part of a subject in attendance either during a regular session or at a Summer School or under approved tuition, before he is accorded another examination. He should, moreover, secure definite approval of his proposed arrangement for tuition before it is entered upon, and will be required to present a satisfactory certificate from his tutor covering the amount of tuition received and the range of work covered.

- (a) In the case of students failing on First Terms papers in December, and falling below 35%, the requirement of additional tuition will be waived, where the student continues under instruction in the same subject taking the Second Term course, and writes the supplemental examination in April of the same session.
- (b) In the case of students failing on First Term or Second Term papers in April and falling below 35%, or not writing in April on First Term work on which they fell below 35%, they are advised, first of all, to take the Summer School instruction in the courses in which they have failed, where it is offered. In cases where they plead inability to attend the Summer School, or in cases where the Summer School program does not provide instruction in the subject in which they are deficient, they are required to apply by the opening date of the summer school period of instruction for approval of a scheme of instruction, in the arrangements for which the Registrar's office will co-operate. Further details will be supplied on request.
- 3. A regular student who obtains less than 8 units of credit at the examinations of any session including the succeeding Summer School will not be permitted to continue his studies at the University nor be registered for University examinations during the next academic session.
- 4. A student in Arts and Science who has not, prior to the opening of the session, completed 36 units of credit, will be regarded as belonging to the Junior Division. A student in Arts and Science who has, prior to the opening of the session, completed at least 36 units of credit, shall be regarded as belonging to the Senior Division. Such a student, who has already completed 40 units of credit in the Junior Division, may elect to proceed in either the Senior Pass Division or the Senior Honors Division.
- 5. A student may not enter the Senior Honors Division unless he has completed 40 units of work in the Junior Division. He may not continue in the Senior Honors Division longer than one annual session unless he has at the close of that session—
  - (1) Obtained 16 units of credit in the Division.
  - (2) Attained a grade of at least 67 per cent. on each of two subjects (representing 8 units of credit) which subjects he proposes to elect in connection with his further work in that Division.

A student may transfer from the Senior Pass Division to the Senior Honors Division at the close of one annual session in that Division provided he has—

- (1) Completed 40 units of work in the Junior Division.
- (2) Completed 16 units of work in the Senior Division.
- (3) Attained a grade of at least 67 per cent. on each of two subjects of the Senior Division (representing 8 units of credit) which subject

he will be permitted to elect in connection with further work in the Senior Honors Division.

- 6. Students are permitted to group themselves into classes or years within the Divisions for purposes of social life, athletics, etc.
- 7. The pass mark in all undergraduate subjects in Arts and Science is 50 per cent., both for extra-mural and intra-mural students.
- 8. (a) The pass mark in all professional subjects in Pharmacy is 60 per cent; in the remaining subjects of the course 50 per cent. When taken by subjects the pass mark for all professional subjects is 70 per cent.
- (b) A student failing on a professional subject of the course in Pharmacy with a mark below 40 per cent. or on a non-professional subject with a mark below 35 per cent. will be required to repeat the lectures and laboratory work of the course in a subsequent session or Summer School. In the case of all failures in Pharmacy, where the required supplemental examination is not passed within the year next ensuing, the same requirement of repetition of lectures and laboratory work will be made.
- (c) A mark of 60 per cent. is required to obtain credit in any non-professional subject on transference from another course to the Degree or Diploma Course in Pharmacy.
- (d) A student of the First Year of the Diploma Course who fails to obtain 60 per cent. of the total maximum marks at the December examination, or who having obtained 60 per cent. of the total maximum marks fails in more than one subject, loses his standing and must repeat the work of the term.
- (e) A student of the Second Year of the Diploma Course who fails to obtain 60 per cent. of the total maximum marks at the December examination, or who having obtained 60 per cent. of the total maximum marks fails in more than one subject, loses his standing and must write on all the subjects of the examination again.
- (f) A student of the First Year of the Diploma Course, who, at the close of the April examinations, has not more than two conditions against him, is granted standing for the year with supplementals, provided his aggregate is at least 60 per cent. of the total maximum marks assigned to all the subjects of his course.
- (g) No student will be allowed to register for the Second Year of the Diploma Course who has a condition of the First Year registered against him.
- (b) A student of the Second Year of the Diploma Course, who, at the close of the April examination, has not more than one condition against him, is granted standing for the year with a supplemental, provided his aggregate is at least 60 per cent. of the total maximum marks assigned to his course.
- (i) A student who has failed at any examination may be required, at the discretion of the Dean of the Faculty and the instructors in the subject, to repeat his attendance before again writing on an examination.
- (j) The University reserves the right to terminate the connection of any student with the course in Pharmacy at any time for what it deems either mental, moral or physical unfitness for professional work.

- (k) Absence from lectures and laboratory periods will not be permitted except for reasons satisfactory to the instructors.
- (l) Diplomas in Pharmacy are graded "Pass" or "With Honors." To secure the latter grade, the student must obtain at least 75 per cent. of the aggregate marks allotted to the full programme of subjects of the Second or Final Year of the course and must pass without condition in each paper at his first examination thereon.
- 9. The September Supplemental Examinations begin on or about the first Tuesday of the month. For them, as for all other supplemental and special examinations, applications should be made at least thirty days in advance and on blank forms intended for the purpose, to be obtained from the Registrar.
  - 10. The scale of fees for supplemental examinations is as follows:

A fee of \$3.00 for the first hour-and-a-half unit and a further fee of \$1.00 for each additional hour-and-a-half unit, whether of half or full papers, up to a maximum of \$8.00.

- 11. In all cases, students who are required to repeat a course of instruction or take a supplemental examination and who fail to present themselves for the same and pass at the Summer School or the September examination following the regular examination at which the original failure was made, must, when they present themselves for examination at a later date, accommodate themselves to any changes in the curriculum that may have been made in the meantime.
- 12. A condition in any subject in which the supplemental examination privilege has been earned may also be removed by writing upon the paper provided in the subject in question at any regular examination where such paper is examined. In such a case the supplemental examination fee is required from the candidate whether or not he has paid at the same time the regular examination fee. He should also make application therefor on a special form provided for such cases by the Registrar.
- 13. September Supplemental Examinations are held at the University, and also at such outside centres in Manitoba, Saskatchewan, Alberta and British Columbia as the Board of Studies may from time to time approve.
- 14. Candidates for any supplemental or special examination should at least thirty days before the date of the examination, make suitable application to the Registrar, from whom blank forms of application may be obtained. The required fee must accompany the application. The fee for a regular examination is payable (along with the tuition fee, if such is required) at the time of registration for class work.

#### **APPEALS**

- 1. Any candidate is at liberty to enter an appeal, within three weeks after the publication of the examination results, against the standing assigned him by the examiners and to request a revision of the marking of one or more of his papers. There is no special form of application for such revision.
- 2. The fee for such revision is \$2.00 for each paper. This fee is payable at the time the appeal is made, and in case the revision takes place, is not returnable, whether the original marking is sustained or not. When the revision is not granted the fee is returnable.

#### **EQUIVALENT EXAMINATIONS**

- 1. Provincial Department of Education examinations are accepted pro tanto by the University, insofar as the subjects and standing are, to the satisfaction of the Board of Studies, the same as, or equivalent to, those required by the University—but candidates offering certificates of having passed such examinations are required to pass in such subject or subjects not covered by their certificates, as may, in the opinion of the Board, be necessary for the completion of the examination, for partial standing towards which such certificates are presented.
- 2. Holders of certificates of educational value, other than those above mentioned, receive such recognition as the Board of Studies may from time to time recommend.

#### Admission Ad Eundem Statum and Ad Eundem Gradum

Members of any other University in His Majesty's Dominions, or of any other University accredited by the University of Manitoba, who may apply for admission to this University, are not required to take the Entrance Examination of the Faculty to which they belong, but may be admitted adeundem statum or adeundem gradum, on presentation of their credentials and payment of the required fee.

#### ATTENDANCE ON LECTURES AND PRACTICAL WORK

All students are expected to be regular in their attendance at lectures.

When the number of absences recorded against a student under the Faculty of Arts and Science in any course exceeds 10% of the number of lectures given for the term in that course, the instructor shall report the case to the Dean, who shall lay it before the Committee on Attendance and Progress of Students. When a student's attendance continues unsatisfactory, the Committee, with the concurrence of the instructor and of the Discipline Committee of the General Faculty Council, has power to exclude such student from classes or examinations, or both. The number of absences is reckoned from the opening date of the term and not merely from the date of registration of the student. When, after repeated warnings, a student is found to be persistently negligent with respect to his work or fails for any other reason to make satisfactory progress, the instructor shall report his case to the Dean, who shall lay it before the Committee on Attendance and Progress of Students. When the student's work still continues unsatisfactory, the Committee, with the concurrence of the instructor and the Discipline Committee of the General Faculty Council, has power to exclude such student from classes or examinations or both.\*

All students in Arts registered in an affiliated College will be expected to comply with the regulations as to attendance and work made by their College and a statement from the Faculty of an affiliated college in which any such student is registered to the effect that his attendance or work has been unsatisfactory, will be sufficient to debar him from examination.

<sup>\*</sup>A student who is debarred from University examinations in any subject or subjects at the end of a term or session because of insufficient attendance or unsatisfactory work, is not allowed to take examination in the subject or subjects subsequently until he has fulfilled the ordinary attendance regulations with respect to such subject or subjects, as applied to new students during a succeeding term or session and has done satisfactory work therein.

No student is allowed to present himself for examination in any laboratory or drafting-room subject, unless he has satisfactorily carried out and recorded the minimum of practical work in each such subject decided upon by his Faculty; the scheme of practical work to be announced at the beginning of each session. This regulation applies to all classes of students, whether of Arts, Science, Engineering, Medicine or Pharmacy, doing practical work under the direction of the University Faculties.

### ISBISTER SCHOLARSHIPS

#### Junior Division in Arts and Science

- 1. There are offered ten scholarships of \$60.00 each to the students ranking highest on the aggregate of an approved course of the value of twenty units selected in accordance with the regulations governing the work for the degrees of B.A. and B.Sc. and at least twelve units of which is for work normally taken by a student in the First Year in the Division.
- 2. There are offered ten scholarships of \$60.00 each to the students ranking highest on the aggregate of an approved course of the value of twenty units, selected in accordance with the regulations governing the work for the degrees of B.A. and B.Sc. and at least twelve units of which is for work normally taken by a student in the Second Year in the Division.

The student must have clear Matriculation standing and must have taken the work within the regular session for which the scholarship is awarded. Work done in a previous session or at a Summer School may not be offered in competition for a scholarship. A minimum of 75 per cent. on the aggregate of the twenty-unit course will be required.

#### Senior Division in Arts and Science

1. There are offered ten scholarships of \$80.00 each to the students ranking highest on the aggregate of an approved course of the value of sixteen units, covering four subjects, selected in accordance with the regulations governing the work for the degrees of B.A. and B.Sc., and at least twelve units of which is for work normally taken by a student in the First Year in the Senior Division. The competition is open to students both of the Senior Pass and the Senior Honors Division. A minimum of 75 per cent. on the aggregate of the sixteen-unit course will be required.

2. There are offered ten scholarships of \$80.00 each for general competition among the students taking subjects normally elected in the Second Year of a student's work in the Senior Honors Division in Arts and the students taking subjects normally elected in the Second Year of a student's work in the Senior Honors Division in Science. A minimum of 75 per cent. will be

required in each of the subjects carried by the student.

#### Latin Philosophy

- 1. There is offered a scholarship of \$60.00 in the First Year in the Latin Philosophy Course for competition among French-speaking students.
- 2. There is offered a scholarship of \$60.00 in the Second Year in the Latin Philosophy Course for competition among French-speaking students.
- 3. A scholarship of \$80.00 is offered for competition in the Latin Philosophy Course of the Third Year in Arts.

A minimum of 75 per cent. on the aggregate of the examinations of the course on which the scholarship is awarded will be required.

#### Pharmacy

There is offered a scholarship of \$60.00 in the First Year of the course in Pharmacy. A minimum of 75 per cent. on the aggregate of the examinations of the course on which the scholarship is awarded will be required.

# GENERAL CONDITIONS OF ELIGIBILITY TO RECEIVE ISBISTER SCHOLARSHIPS

- 1. A student is not qualified to receive a scholarship unless:
- (a) He has been ranked above all competitors on the aggregate of the marks in the subject or subjects for which the scholarship is given, or, in cases where more than one scholarship is offered, is one of a group that has been so ranked, or has become eligible through reversion. In all cases where general proficiency scholarships are awarded, not upon a fixed course but upon a course involving elective subjects, the practice has been adopted of raising the highest candidate in each subject to 100 per cent. and the others likely to be in competition in proportion and of comparing the competitors upon the basis of these raised percentages.
- (b) And has removed at the same examination, or prior to it, any condition from a previous year or grade that may have been registered against him.
- 2. No student may hold more than one scholarship. If a student succeeds in otherwise qualifying for more than one scholarship in any year, he will be allowed to receive but one, and his name will be entered upon the list as having qualified for the other, though not entitled to any of the funds, and such other scholarship will be granted to the one ranking next to him, provided he is otherwise eligible.

# CONDITIONS GOVERNING THE PAYMENT OF ISBISTER SCHOLARSHIPS

The general conditions governing the payment of these scholarships are determined by the terms of the will under which the trust was established, from which the following is an excerpt:

"I desire it to be understood that I establish this trust for the benefit and improvement of education in the Province of Manitoba, and it is my wish that it shall take the form of a general scholarship or prize fund for the encouragement of meritorious students and scholars in the various places of education in the Province for bo'h sexes, from the Common School to the Colleges and Institutions and Private Schools where the highest education is given without any distinction of race, creed, language or nationality. In the Lower Schools this encouragement may take the form of prizes, and in the Higher Schools that of scholarships of sufficient value to maintain or help to maintain the holder at a College or University either in Canada, Great Britain or elsewhere, and I leave the Governing Body of the Manitoba University free to carry out the objects of the trusts now confided to them in the manner which to them may seem best."

The scholarships are paid during the course of the annual session following that at the examinations of which they were won, provided the winners are duly enrolled and regularly in attendance at the University or an affiliated college, upon the full work of the next succeeding year of the degree course they have begun, and payment is made upon the following plan: One moiety on the second Monday in November and one moiety on the second Monday in February, upon receipt by the Bursar of certification as to the award of

the scholarship from the Registrar and as to compliance with the above requirements of registration and attendance from the Dean and the President in the case of students registered for instruction in the University, and from the Registrar of the University and the head of the College in question in the case of students registered for instruction in an affiliated college.

If, for any reason, the winner of a scholarship is not in attendance as an intra-mural student during the academic year next following that in which the which the scholarship is won, the scholarship will automatically be extended for another year.

If, for any reason, the winner of a scholarship is not in attendance during the two academic years next following that in which the scholarship is won, the scholarship will lapse.

The values stated for the scholarships are the maximum values which the scholarships will not exceed. If the funds do not allow of the scholarships being of such maximum value, then they shall be proportionately of such value as the funds will allow.

# AIKINS SCHOLARSHIPS IN THE ENGLISH LANGUAGE AND LITERATURE

The late Sir James Aikins, a former Lieutenant-Governor of Manitoba, and for many years a member of the Council of the University and its Honorary Bursar, established in his lifetime a trust for the purpose of providing annually what are known as the Aikins Scholarships in the English Language and Literature. They are awarded to the students ranking first at the annual examinations in English I, English II and English III respectively, and have the same conditions attached as are attached to the Isbister Scholarships with respect to a minimum standing of 75 per cent. in the subject, concurrent completion of a full course of study of the year in question and freedom from prior conditions. They are paid during the next succeeding annual session upon the same plan as that of the Isbister scholarships. The amounts have been fixed for the present at the following:

English	I	\$.75.00
English	II	75.00
English	III	125.00

#### B'NAI B'RITH HILLEL FOUNDATION ESSAY COMPETITION

The Board of Management of Hillel Foundations of the Order B'nai B'rith has made an annual grant of \$200.00 to the University of Manitoba for the purpose of establishing and maintaining an essay competition, open to all students, irrespective of religious affiliation, the subject to be related to some aspect of Jewish history, life or culture.

The topic on which essays shall be submitted in the 1933 competition is "The Influence of the Jew and the Arab on European Culture Prior to the Renaissance."

The essay shall be of not less than 5,000 and not more than 10,000

words, and, to win a prize, must be of approved merit. Any student registering for a full ordinary course of study in any faculty or department of study in the University of Manitoba or an affiliated college for the session 1933-1934, shall be eligible to compete. Any essay to be considered, must be in the hands of the Registrar not later than November 1st, 1933. The examiners, one of whom shall be a member of the Order B'nai B'rith, resident in Winnipeg, shall be named by the Council of the University on the nomination of its Board of Studies. Prizes shall be awarded as follows: First Prize, \$100.00; Second Prize, \$65.00; Third Prize, \$35.00.

# KHAKI UNIVERSITY OF CANADA AND YOUNG MEN'S CHRISTIAN ASSOCIATION MEMORIAL BURSARIES

There are offered annually by the University of Manitoba a number of cash bursaries known as the Khaki University and Young Men's Christian Association Memorial Bursaries. They are considered as tenable along with other University Scholarships. The award is made by the University Council on the recommendation of a Committee of Selection to be appointed by the Council. In choosing the holders of bursaries consideration is given not only to literary and scholastic attainments, but also to personal character, qualities of leadership and the financial circumstances of the applicants. Preference will be given to the sons and daughters of soldiers of the Great War and to soldier students who saw service overseas.

Applications for these bursaries will be received by the Registrar of the University during the first month of each annual session, and the award will be announced towards the close of the first term. A form of application may be obtained at the Registrar's office.

#### 1851 EXHIBITION SCHOLARSHIPS

By a recent decision of the Royal Commission for the Exhibition of 1851 the University of Manitoba has been included in the list of overseas Universities that are invited to recommend candidates for the Scholarships that are awarded annually by the Commissioners. Every candidate put forward must be a British subject under twenty-six years of age and a bona fide student of science of not less than three years' standing. His qualifications for pursuing independent research must be such as to entitle his candidature to serious consideration. The scholarships are of the value of £250 per annum with certain additional allowance. They are tenable ordinarily for two They are tenable ordinarily for two years, the continuation for a second year depending upon the satisfactory nature of the scholar's first year's work. In cases of exceptional merit, where it appears that the renewal is likely to result in work of scientific importance, renewal for a third year may be accorded. These Scholarships may be held, with the approval of the Commissioners, at any institution in Great Britain or abroad, but a scholar will not be permitted to conduct his investigations in the country in which he has received his scientific education.

Applications from students of the University of Manitoba to have their records considered with a view to their possible nomination to the Commissioners for one of these Scholarships, should be in the hands of the Registrar by March Ist in any year.

#### THE HART SCHOLARSHIP IN CLASSICS

A scholarship of the value of \$50.00 is offered annually for competition among students of the First Year of the Senior Division in Arts, taking Latin III and either Greek III or Greek IV. It will be awarded on the combined results of the examinations of the session in both courses. This scholarship may be held along with the Isbister or other scholarship awarded on the examinations of the same year. The same conditions are laid down as in the case of the Isbister Scholarships, viz., a minimum standing of 75 per cent. in both the courses on which the award is made, concurrent completion of a full, normal year's work, and freedom from prior conditions. The scholarship will be paid during the next succeeding annual session upon the same plan as the Isbister Scholarships.

The Hart Scholarship is provided from the revenue of a trust fund created by a bequest for the purpose in the will of the late Mrs. Thomas Hart, made in memory of her husband the Rev. Professor Thomas Hart, M.A., D.D., who was professor of Classics in Manitoba College from 1872 to 1910, and her son, Lieutenant-Colonel William Malloch Hart, M.C., B.A., 1903, M.D., 1907.

#### PHYSIOLOGICAL RESEARCH PRIZE

During the tenure of the chair of Physiology in this University by Professor Swale Vincent, and largely as the result of his efforts, a fund was established to provide annually, or at longer intervals, a prize for original investigation carried out in the departments of Physiology or Biochemistry. The regulations governing the award of this prize are as follows:

- (1) The prize shall be called "The Physiological Research Prize."
- (2) The prize shall be awarded annually or biennially, or may be withheld at the discretion of the Committee (vide infra).
- (3) The interest on the money invested shall be utilized to provide a medal and a money prize for the report on an original investigation, which shall be deemed by the Committee to be of the greatest merit.
- (4) The essay submitted must in each case contain an account of original investigation carried out wholly or in part in the Department of Physiology or of Biochemistry of the University of Manitoba.
- (5) The subject of the investigation shall be some branch of Physiology or some allied medical or biological subject, and shall be approved by the Committee before the work is commenced.
- (6) Work carried out in conjunction with another investigator or results published conjointly with another author may be submitted by a candidate for the prize. In such cases the Committee will take into consideration the part actually taken by the candidate in the work done. Further, in such cases, the candidate must send in an account of the results obtained in the form of an essay, which must be his own unaided composition.
- (7) Registered students of the University of Manitoba, and members of the staff, other than professors or lecturers, shall be eligible to compete.
- (8) Medical practitioners shall be eligible to compete on registration as students of the University.

- (9) The duty of making a recommendation for the award of the Prize shall be delegated to a committee consisting of the Professor of Physiology and two others selected by the Medical Faculty Council.
- (10) Essays must be in the hands of the Secretary of the Medical Faculty before April 30th of each year.

#### SCIENTIFIC CLUB'S RESEARCH PRIZE

The Scientific Club of Winnipeg, desiring to foster the spirit of research in the University of Manitoba, will again offer a prize, to be known as the Research Prize of the Scientific Club of Winnipeg, under the following conditions:

- 1. The next award shall be made at the Spring Convocation of 1935 by the University Council on the nomination of the Scientific Club of Winnipeg, and the prize shall be of the value of \$150.00.
- 2. The prize shall be awarded for the most meritorious research work conducted in the University of Manitoba by an undergraduate or graduate of any University, who shall have received his last degree examination not earlier than 1933. Members of the Faculty and those who have already received the degree of Ph.D. in Science or D.Sc. or equivalent degree, shall not be eligible for the award.
- 3. The eligibility of candidates not included in the above regulation shall be decided by the Scientific Club.
- 4. A person who has once received the award, either in whole or in part, shall not again be eligible.
- 5. No award shall be made unless the researches submitted are, in the opinion of the Club, suitable for publication in a journal of repute.
- 6. Candidates shall deposit three copies of published papers or of a full properly typewritten report of the research to be submitted, with the Registrar of the University on or before March 20th, 1935.

#### FRENCH GOVERNMENT BURSARY

By the generosity of the Government of the French Republic, the University of Manitoba is permitted to nominate from time to time a student who has shown promise of proficiency in French studies, to receive a bursary of 6000 francs (with an additional allowance of 5000 francs for travelling expenses) to enable him to study for a year in France. For further particulars any one interested should consult the head of the French Department or the Registrar.

#### LOAN FUND OF THE UNIVERSITY WOMEN'S CLUB

The University Women's Club has established a Loan Fund, the purpose of which is to give financial assistance to senior women students of the University of Manitoba, by loaning them sums of money to enable them to complete their course. No interest is charged on the loans, and the period of

repayment is arranged to suit the convenience of the applicant. As the Fund is not large, the loans are necessarily restricted in amount, and are intended chiefly to meet emergency requirements. Enquiries may be addressed to the Dean of Women of the University, or of an affiliated college, or to Miss Myrtle Lewis, Department of Education, Legislative Building, Winnipeg.

# SCHOLARSHIP OF THE CANADIAN FEDERATION OF UNIVERSITY WOMEN

- 1. The Scholarship of the Canadian Federation of University Women of the value of \$1250, available for study or research work, is open to any woman holding a degree from a Canadian University. In general, preference will be given to those candidates who have completed at least one or two years at graduate study and have a definite plan of advanced study or of research in view. The award is based on evidence of character and ability of the candidate and promise of success in the subject to which she is devoting herself.
- 2. There are no application blanks, and application is made by letter to the Convener of the Scholarship Committee, Dr. A. Vibert Douglas, McGill University, Montreal, P.Q.

Applications and recommendations must be received not later than February 1st. None can be accepted after that date.

- 3. The letter of application should contain an account of the applicant's educational training and a statement in full of the plan of study or research she intends to pursue. This information should be accompanied by:
  - (a) A written statement from the President of the college or University awarding the degrees held by the applicant to the effect that her application as a suitable candidate is approved.
  - (b) Theses, papers or reports of investigations published or unpublished.

All papers submitted by the applicant will be returned if postage is sent for that purpose. Confidential letters will be kept.

4. Testimonials as to her health, character, ability and scholarship should be sent directly to the Convener by the professors or others who support the candidature.

All testimonials and references should be in writing. The committee will assume no responsibility for making enquiry beyond the papers submitted.

- 5. The choice of the University at which the successful candidate shall pursue her study or research work is left to the Committee of Selection, in consultation with the candidate.
- 6. The scholarship is payable in two equal instalments on July 1st and January 1st by the Treasurer of the Federation, provided the successful applicant sends her address for those dates.
- 7. At the end of her tenure, the candidate shall send a report of her work, together with a statement of its worth from the professor or other authority conversant with her research, to the Convener of the Scholarship Committee.

### THE I.O.D.E. OVERSEAS POST GRADUATE SCHOLARSHIP

A Scholarship to the value of \$1600 for post graduate study in any British University is offered each year to graduates of the University of Manitoba; students in the last year of their course may also apply. Applications for the Scholarship for 1934-1935 must be sent in by October 6th, 1933. Application forms and information may be obtained from Mrs. L. McQuillin, Provincial Educational Secretary I.O.D.E., 398 Maryland Street (or 200 Donalda Block), Winnipeg.

#### THE I.O.D.E. BURSARY

A Bursary to the value of \$300 a year for four years is offered by the Daughters of the Empire each year to cover a course of study at the University of Manitoba. For this Bursary only the sons and daughters of men killed or totally disabled in the Great War are eligible. Applications for the Bursary to be awarded for the coming year must be made by March 1st. Application forms and information may be obtained from Mrs. L. McQuillin, Provincial Educational Secretary I.O.D.E., 398 Maryland Street (or 200 Donalda Block), Winnipeg.

#### UNIVERSITY TRAVELLING FELLOWSHIPS

Two University Travelling Fellowships, each of the value of \$400.00, are offered for award each year to graduates of the University of Manitoba and under the following conditions:

- 1. The object of the award of these Fellowships shall be to assist the students to whom they are given to enter upon graduate work in an approved University.
- 2. One Fellowship shall be awarded each year to a Bachelor of Arts of the University of Manitoba and one every alternate year to a Bachelor of Science of the University of Manitoba and one every alternate year to a Bachelor of Science in Engineering of the University of Manitoba. The awards of 1934 will be in Arts and Engineering.
- 3. In order to be eligible to become a candidate for one of these fellowships, a student must—
- (a) Hold the requisite degrees of the University of Manitoba as indicated above.
- (b) Have spent at least three academic years in attendance at the University of Manitoba or an affiliated College.
- (c) Be not more than twenty-five years of age (that is the University Council must be assured that he will not have attained his twenty-sixth birthday by October 1st of the year for which the fellowship is awarded).
- 4. In considering the claim of each candidate for a University Travelling Fellowship, the Committee of Nomination shall take into account the following:
- (a) The candidate's scholarship as shown by his undergraduate course and subsequent studies, if any;

- (b) The candidate's personality and general record;
- (c) The candidate's ability to profit by postgraduate studies;
- (d) The relation of the postgraduate course proposed by him, both to his undergraduate studies and to the career he plans to follow.

#### THE RHODES SCHOLARSHIP

The trustees of the late Cecil Rhodes have assigned a Rhodes Scholarship to the Province of Manitoba.

This Scholarship will hereafter be thrown into open competition in the Province, subject to the following conditions:

- 1. It is open equally to students in all Faculties.
- 2. Candidates must be British subjects, with at least five years' domicile in Canada and unmarried. They must have passed their nineteenth, but not have passed their twenty-fifth birthday, on October 1st of the year for which they are elected.
- 3. Candidates must have reached such a stage in their course at some recognized degree-granting University or College of Canada, that they will have completed at least two years at the University or College in question by October 1st of the year for which they are elected.
- 4. Candidates may compete either in the Province in which they have received at least two years of their college education, or in the Province in which they have their ordinary private domicile, home or residence.

In each Province there is a Committee of Selection, in whose hands the nominations will rest subject to ratification by the Trustees. The Secretary of the Committee of Selection for Manitoba is Professor Skuli Johnson, University of Manitoba, Winnipeg, who will supply a form of application on request.

In that section of the Will in which he defined the general type of scholar he desired, Mr. Rhodes wrote as follows:

"My desire being that the students who shall be elected to the scholarships shall not be merely bookworms, I direct that in the election of a student to a scholarship regard shall be had to:

- 1. His literary and scholastic attainments.
- His fondness for and success in manly outdoor sports such as cricket, football and the like.
- His qualities of manhood, truth, courage, devotion to duty, sympathy for and protection of the weak, kindliness, unselfishness and fellowship.
- 4. His exhibition during school days of moral force of character and of instincts to lead and to take an interest in his schoolmates for those attributes will be likely in after life to guide him to esteem the performance of public duty his highest aim.

Distinction both in character and personality and in intellect is the most important requirement for a Rhodes Scholarship, and it is upon this that Committees will insist. Success in being elected to office in student organizations may or may not be evidence of leadership in the true sense of the word. Cecil Rhodes evidently regarded leadership as consisting in moral courage and interest in one's fellow men quite as much as in the more aggressive qualities. Physical vigour is an essential qualification for a Rhodes Scholarship, but

athletic skill is of less importance than the moral qualities developed in playing outdoor games. Poverty does not give a special claim to a Scholarship. The strongest candidate will be appointed regardless of his financial circumstances. In general candidates will be preferred who will be under the age of 23 when they go into residence at Oxford. In the absence of a strong candidate the Committees will make no appointment.

Every candidate for a Scholarship is required to furnish to the Committee of Selection for his Province the following:

- (a) A certificate of age.
- (b) A photograph preferably unmounted and not larger than 4 x 7 inches.
- (c) A written statement from the President or Acting President of his College or University to the effect that his application as a suitable candidate is approved.
- (d) Certified evidence as to the courses of study pursued by the scholar at his University, and as to his gradings in those courses. This evidence should be signed by the Registrar or other responsible official of his University.
- (e) A brief statement by himself of his athletic and general activities and interests at College, and of his proposed line of study at Oxford.
- (f) References from six persons well acquainted with him whose addresses must be given in full and under at least two of whom he must have studied.
  - (g) A medical certificate.

Except under exceptional circumstances the Committee of Selection may summon a candidate to attend a meeting of the Committee of Selection and to write a brief essay.

The next appointment for Manitoba will be made in 1933, the tenure to begin in 1934. Applications for the Scholarship, with all required material, must reach the Secretary of the Committee of Selection not later than November 10th, 1933.

A Rhodes Scholarship is tenable at the University of Oxford and may be held for three years. Since, however, the majority of Rhodes Scholars obtain standing which enables them to take a degree in two years, appointments are made for two years in the first instance, and a Rhodes Scholar who may wish to remain for a third year will be expected to present a definite plan of study for that period, satisfactory to his College and the Rhodes Trustees.

Rhodes Scholars may be allowed, if the conditions are approved by their own College and by the Oxford Secretary to the Rhodes Trustees, either to postpone their third year, returning to Oxford for it after a period of work in their own countries, or may spend their third year in post-graduate work at any University of Great Britain, and, in special cases, at a University on the continent of Europe, the overseas Dominions, or in the United States, but not in the country of their origin. The stipend of a Rhodes Scholar is fixed at £400 per year. At most Colleges, and for most men, this sum is not sufficient to meet necessary expenses for term-time and vacations, and scholars who can afford to supplement it by say £50 per year from their own resources, will find it advantageous to do so.

The scholars elect will come into residence in October of the year for which they are elected.

Students who have obtained the B.A. Degree at the University of Manitoba provided that they have resided three years at this University may apply for "Senior Standing" at Oxford, exempting them from all preliminary and intermediate examinations, and making it possible for them to take their Final Honours Schools and B.A. Degree, in two years.

Students who have resided two years at a Canadian University, and passed the examinations incident to a two years' course which has included two languages, other than English, one of which must have been either Latin or Greek, may apply for Junior Standing at Oxford, which carries with it exemption from Responsions but not from the intermediate examination. They can proceed to their B.A. Degree in two years, provided that they obtain Honours either in Moderations or in the Final Honours Schools. Greek is no longer an obligatory subject at Oxford.

#### Manitoba Rhodes Scholars

Name	College
1904—John MacLean	
1905—William John Rose	Magdalen
1906—Stuart Eccles Beech	Queen's
1907—Andrew Howard Miller	
1908—Howard Robert Lawrence Henry	
1909—Skuli Johnson	Oriel
1910—Joseph Thorarinn Thorson	
1911—Eldon Rooklidge Siddall	
1912—Alfred Ewert	
1913—William Nason	Oriel
1914—Simon Abrahamson	Merton
1915—Morley Semmons Lougheed	Christ Church
1916—Erskine Wallace Ireland	New
1917—William Burton Hurd	Queen's
1918-—George Percival Raymond Tallin	
1919—Charles Rhodes Smith	
1920—Edward Bruce Pitblado	Queen's
1921—John King Gordon	Queen's
1922—Graham Spry	University
1923—Arnold Danford Heeney	St. John's
1924—Arthur Wallace Johnston	Brasnose
1925—Reginald Wilfred Westgate	Balliol
1926—Hector Allard	St. John's
1927—John Ross McLean	Balliol
1928-David McIntosh Turnbull	St. John's
1929—Lawrence Christopher Bonnycastle	Wadham
1930-John Robert Beattie	Queen's
1931—James Elliott Coyne	Queen's
1932—William Lewis Morton	St. John's
1933—Carl Arthur Winkler	

#### MEDALS IN ARTS AND SCIENCE

- 1. The Governor-General's Gold Medal, the gift of His Excellency the Governor-General, is offered annually for competition among students who have completed the Junior Division and sixteen units in either the Senior Pass or the Senior Honors Division, the aggregate upon the entire fifty-six units of work then completed being taken into account.
- 2. A University Gold Medal and a University Silver Medal are offered for competition annually among students completing the work of the Senior Pass Division in Arts and Science and proceeding to the B.A. or B.Sc. degree, comparison being made on the basis of the method of raised percentages used in the determination of general proficiency scholarship awards and the students' records being considered for the last sixteen units of credit they have earned, on the aggregate of which they must have attained a standard of at least 80 per cent., and twelve of which must be for work normally taken in the second year of the Senior Pass Division.
- 3. Five University Gold Medals are offered for competition annually among students completing the work of the Senior Honors Divisions in Arts and Science, and proceeding to the B.A. Honors or B.Sc. Honors degree who have attained a standard of at least 80 per cent. on both their subjects, comparison being made on the basis of the method of raised percentages used in the determination of general proficiency scholarship awards and the students' records being considered for the last sixteen units of credit they have earned, all of which must be for work normally taken in the Third Year of the Seniors Honors Division.
- 4. A Gold Medal, donated annually by the Omega Chapter of Tau Delta Phi Fraternity, in memory of the late Ephraim Buckwold, B.A., 1930, who died in 1931 while a student of Medicine, is awarded to the regular student of the Senior Division in Arts and Science, who has taken Economics in the Second Year of that Division and has attained the highest standing of his class (not less than 80%) on the aggregate of the First Year Senior Division course in Economics (Economics III) and the portion of the Second Year Senior Division course in Economics that is common to Economics IV, Economics IVG and Economics IVH. This medal is known as the Ephraim Buckwold Medal in Economics.

#### MEDALS IN PHARMACY

A Silver Medal, offered by the Council of the Manitoba Pharmaceutical Association, is awarded annually to the student standing first in order of merit at the examination of the first year of the diploma course in Pharmacy, provided his standing on the aggregate of the marks be 80 per cent. or above.

A Gold Medal, offered by the Council of the Manitoba Pharmaceutical Association, is awarded annually to the student standing first in the order of merit at the examination of the Second Year of the diploma course in Pharmacy, provided his standing on the aggregate of the marks be 90 per cent. or above.

A Silver Medal, offered by the Council of the Manitoba Pharmaceutical Association, is awarded annually to the student standing first (or second)

in the order of merit at the examination of the Second Year of the Diploma course in Pharmacy, provided his standing on the aggregate of the marks be

80 per cent. or above.

A Silver Medal, known as the Flexon Silver Medal, offered by the Council of the Manitoba Pharmaceutical Association in memory of Mr. Charles Flexon, a former president of the Association, is awarded annually to the student ranking highest (with 85 per cent. or above) in the subject of Chemistry of the Second Year of the Diploma course in Pharmacy. The medal is accompanied by a cash prize of \$25.00, known as the Mallinckrodt Prize in Chemistry. The cash award is made for the highest standing in the subject, even when the student does not qualify for the Flexon Medal.

#### **DEGREES IN ABSENTIA**

No degree will be conferred in absentia except where good reasons for absence have been submitted to and approved by the Board of Studies, or the Council, and an additional fee of ten dollars may be exacted in each case where permission is granted.

#### UNIVERSITY ACADEMIC DRESS

In the materials and colors prescribed by the University for the hoods to be worn by graduates, the following general principles are observed:

All Bachelors' hoods are of the "simple" or "Oxford" shape, are of black worsted stuff (except that for the Bachelor of Laws degree, which is of black silk), are edged with white rabbit skin and bear a narrow braid of green silk on the black material at a short distance from the rabbit skin edging. They have distinctive colored silk linings as hereunder.

All Masters' hoods are of the "simple" or "Oxford" shape, are of

black corded silk and have distinctive colored silk linings as hereunder.

The linings for Bachelors' hoods are as follows:

Bachelor of Arts-No lining. Bachelor of Laws-White silk.

Bachelor of Science-Gold-yellow silk. This lining is basic for all Bachelor of Science degrees and each has a further distinguishing band of color, about three-eighths of an inch in width, on the gold-yellow lining at a short distance from the rabbit skin edging.

For Bachelor of Science in Agriculture-Green.

For Bachelor of Science in Pharmacy—Light Blue. For Bachelor of Science in Engineering—

For Bachelor of Architecture-

For Bachelor of Science in Home Economics-Maroon.

For Bachelor of Science in Medicine-Purple. The linings for Masters' hoods are as follows:

Master of Arts (including Master of Arts in Education) - Scarlet corded silk.

Master of Science (including Master of Science in Engineering and Master of Science in Agriculture) - Gold-yellow corded silk.

The hood for the degree of Doctor of Medicine is of the "full" or "Cambridge" shape and is of black cashmere lined with purple corded silk.

The hood for the degree of Master of Surgery is the same as for the Doctor of Medicine, with the addition of a band of violet silk at a short distance from the edge of the lining.

# THE MANITOBA UNION

The building formerly known as the Residence or Dormitory Building of Manitoba Agricultural College will, in future, be operated for the students as the centre of their social and community life. There are in this building facilities to provide living accommodation for some five hundred students, men and women, besides gymnasia, baths, swimming pools and recreation rooms for all who use the campus. It is hoped too that the alumni and friends of the University and organizations formerly resorting to Manitoba Agricultural College for their social and educational meetings, conferences and instructional courses, will continue to feel that this building and the privileges of the campus generally are at their disposal, insofar as they are not taken up by the regular instructional programs of the various faculties.

The rooms in the Manitoba Union are provided at a rental of \$2.00 per week, and it is expected that two students will occupy a room, the rooms being furnished accordingly. Applications therefor should be made to the Dean of Women by women students, or to the Head of the Men's Residence by men students. Applications will be dealt with in the order in which they are received. Board will be provided at \$5.00 per week in the University dining-room, and consideration is being given to the establishment of a cafeteria system by which, as an alternative, the student might purchase a meal ticket for \$5.00, which, in event of absence during week-ends or for other reasons, would enable him to adjust expenditure for board to what he actually receives. Room rent is paid in advance by the term and board likewise, except where in special cases instalment payments are arranged with the Bursar.

The following additional payments at the opening of the session are required from students using the residence and dining-room accommodation of the Manitoba Union:

Medical Examination and Nursing Care	\$5.00
Laundry	5.00
Caution Money	5.00
Key Deposit	1.00

All payments for privileges in connection with the Manitoba Union are made at the office of the Bursar, Administration Building.

# UNIVERSITY BOOK DEPARTMENT

In order to ensure prompt and reliable service in connection with the supply of text books, notebooks and other materials for students' use, the University operates a book store with branches in the basement of the Administration Building on Kennedy Street and in the Arts Building on the Fort Garry site, at which everything of this nature can be purchased at the lowest possible prices. Students are urged to make full use of the facilities provided. Any who expect to have available time during the summer are strongly advised to secure as many texts as possible before leaving for the vacation. Students when out of town may secure their books and supplies by mail.

Address all orders to: The Manager,

UNIVERSITY OF MANITOBA BOOK DEPARTMENT WINNIPEG.

### **FEES**

The following fees are required and must be paid to the Bursar of the University in advance. Regular examination fees are payable at the time of registration, degree fees not later than the last date for payment of first term tuition fees of the final year. Supplemental examination fees are payable at the time application for the examination is made. The fees for admission ad eundem statum or ad eundem gradum are payable at the time application therefor is made.

REGISTRATION IN ARTS AND SCIENCE	
Junior Division, each four-unit subject	\$2.00
Senior Division, each four-unit subject	\$2.50
2002	\$3.00
and proportionately for subjects of differing credit value.	
Senior Division in Arts and Science—  Each four-unit subject	\$3.75
and proportionately for subjects of differing credit value.	\$ J • / J
Junior Division and Senior Division—  A fee of \$3.00 for the first hour-and-a-half unit and a fee of \$1.00 for each additional hour-and-a-half unit, of half or full papers, up to a maximum of \$8.00.	
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EXAMINATIONS IN PHARMACY	
	\$15.00
EXAMINATIONS IN PHARMACY Regular Examinations—	\$15.00
EXAMINATIONS IN PHARMACY  Regular Examinations—  Each annual session———————————————————————————————————	\$15.00
EXAMINATIONS IN PHARMACY  Regular Examinations— Each annual session  Supplemental Examinations— As in Arts and Science.	\$15.00
EXAMINATIONS IN PHARMACY  Regular Examinations— Each annual session  Supplemental Examinations— As in Arts and Science.  TUITION IN ARTS AND SCIENCE  Junior Division— Each four-unit subject	\$15.00 \$23.00
EXAMINATIONS IN PHARMACY  Regular Examinations— Each annual session  Supplemental Examinations— As in Arts and Science.  TUITION IN ARTS AND SCIENCE  Junior Division— Each four-unit subject	
EXAMINATIONS IN PHARMACY  Regular Examinations— Each annual session  Supplemental Examinations— As in Arts and Science.  TUITION IN ARTS AND SCIENCE  Junior Division— Each four-unit subject— and proportionately for subjects of differing credit value.  Senior Division—	\$23.00
EXAMINATIONS IN PHARMACY  Regular Examinations— Each annual session  Supplemental Examinations— As in Arts and Science.  TUITION IN ARTS AND SCIENCE  Junior Division— Each four-unit subject	
EXAMINATIONS IN PHARMACY  Regular Examinations— Each annual session	\$23.00

ment the student receives instruction.)

Payment of Second Term tuition fees may be deferred to first week of the Second Term, but only on the understanding that the student becomes responsible for a deferred payment fee of \$2.00.

(The tuition fee of each special student is determined by the Dean of the Faculty concerned after consultation with the Professor in whose depart-

Tuition, each annual session.

#### MISCELLANEOUS FEES

#### Laboratory Fees

Laboratory fees are charged students taking Science courses on the following scale, viz., \$2.50 per full subject in the Junior Division and Senior Pass Division in Arts and Science and in Pharmacy, and \$5.00 per full subject in Senior Honors Division in Arts and Science. The maximum laboratory fee in the Junior Division and in Pharmacy will be \$5.00 and in the Senior Division will be \$10.00.

#### Library Fee

An annual Library fee of \$2.00 is required from each Arts and Science student taking any University classes and is payable at time of registration. A student taking instruction only at an affiliated College must pay this fee if he desires to use the University Library.

#### Degree Fees

For the Degree of B.A.	\$10.00
For the Degree of M.A.	10.00
For the Degree of LL.B.	10.00
For the Degree of B.Sc. (Phar.)	10.00
For the Degree of B.Sc.	10.00
For the Degree of M.Sc.	10.00
For the Diploma in Pharmacy	10.00
For the conferring of any Degree in absentia (for which the consent of the Board of Studies or the University Council must be	
secured), an additional fee of	10.00
For admission ad eundem statum	
For admission ad eundem gradum	5.00
General	
Appeals, each paper	\$2.00
Entrance Fee (payable the first time a student registers under the	
Faculty of Arts and Science)	2.00
For a Certificate of Standing	2.00

#### Caution Money

1.00

For a Statement of Marks, on request\_

All students taking practical or laboratory classes in the University, are required to deposit with the Accountant at the beginning of each session the sum of \$5.00. Against this will be assessed the value of all apparatus broken or materials wasted in any way other than in the legitimate course of class work, and the balance will be refunded at the close of the term.

#### Student Organization Fee

The annual fee as set by the various student groups (University Arts, Science, or Pharmacy) for their members is paid to the Bursar at the time of registration and these sums are held by him to the credit of the respective student treasurers. This fee has been fixed at \$8.50 for the session 1933-1934, and is required from all Arts and Science and Pharmacy students.

### THE UNIVERSITY LIBRARY

Frank Emmett Nuttall, M.A., Librarian

The main Library and Reading Room occupy a considerable area of the third floor of the new Arts building on the Fort Garry site, with a stackroom extending to the fourth floor. A small working library for the use of the Junior Division remains in the old Library premises on Kennedy Street. There is a Library for the Science departments in the new Science Building, as well as libraries for the following departments: Architecture, on the fourth floor of the new Arts Building; Engineering, in the Engineering Building; and Pharmacy, in the Pharmacy Department, Broadway. The total number of volumes is about 53,000. The accessions for the past year have been about 900 volumes. The nucleus of the collection was that portion of the Isbister Library which escaped destruction by fire, but the greater part of it has been acquired during the past twenty-one years by purchase or gift.

The following periodicals are received by the University:

Actuarial Students' Magazine Agricultural and Industrial Progress in Canada American Architect and Architectural Review American Association of Petroleum Geologists: Bulletin American Concrete Institute: Journal American Concrete Institute: Proceedings American Economic Review American Historical Review American Institute of Actuaries: Record American Journal of Mathematics American Journal of Pharmacy American Journal of Philology American Journal of Science American Journal of Semitic Languages and Literatures American Journal of Sociology American Mathematical Monthly American Mineralogist American Museum Novitates American Naturalist American Political Science Review

American Railway Association: Telegraph
and Telephone Section: Proceedings American Society of Heating and Ventilating Engineers: Transactions American Society of Mechanical Engineers: Transactions Anatomischer Anzeiger Ancient Egypt Anglia Anglia: Beiblatt Annalen der Physik Annales de Chimie Annales de l'Université de Paris Annals of Botany Annals of Mathematical Statistics Annals of Mathematics Annals of the American Academy of

Political and Social Science Annals of the Entomological Society of America Annotated Bibliography of Economic Geology Architectural Forum

Architectural Record

Architecture

Architectural Review (London)

Aristotelian Society: Proceedings Art and Archaeology Art et Décoration Arts and Decoration Astronomical Journal Auk

Banker Bankers' Magazine (English) Beaux-Arts Institute of Design: Bulletin Beaver Bell Laboratories Record Bell System Technical Journal Bell Telephone Quarterly Berichte der Deutschen botanischen Gesellschaft Berichte der Deutschen chemischen Gesellschaft Biological Abstracts Biological Bulletin Biometrika Bookman (London) Botanical Gazette Botanisches Centralblatt British Chemical Abstracts British Journal of Psychology British Trade Journal and Export World Brown and Gold: Year Book of the University of Manitoba Students' Union Brown Boveri Review

Bulletin de la Société chimique de France Bulletin des Recherches Historiques (Quebec) Bulletin of the American Society for Testing Materials Bulletin of the Bureau of Education

Department of the Interior, U.S.A. Bulletin of the Geological Society of America

California Fish and Game Canada: Monthly Bulletin of Agricultural Statistics Canada: Quarterly Report of the Department of Trade, etc. Canada Gazette

Canada Year Book Canadian Bar Review Canadian Engineer Canadian Entomologist Canadian Field Naturalist Canadian Historical Review Canadian Geographical Journal Canadian Homes and Gardens Canadian Medical Association Journal

Canadian National Railway Magazine

Canadian Periodical Index

Canadian Pharmaceutical Journal Canadian Political Science Association: Proceedings

Canadian Railway & Marine World Canadian Student Centralblatt fur Mineralogie, Geologie und Paleontologie Ceylon Journal of Science Chase Economic Bulletin

Chemical Abstracts Chemical Reviews Chemical Society of Japan: Bulletin

Chemisches Zentralblatt

Citizens' Research Institute of Canada: Publications

City Planning Classical Journal Classical Philology Classical Quarterly Classical Review Classical Weekly Commercial Intelligence Journal Compressed Air Magazine Comptes rendue de l'Académie des

Sciences Concrete Concrete and Structural Engineering Connoiseur Construction Contract Record Credit Men's Journal

Cumulative Book Index

Dalhousie Review Deutsche Echo (Das) Deutsche Literaturzeitung Deutsche Volkslied (Das) Dominion of Canada: Meteorological Service, Daily and Monthly Weather Maps Druggists' Circular

Echo (Das) Ecology Economica Economic Geology Economic History Review Economist EIC News Electrical Review Electrical World Electrician Electric Journal Electronics Engineer Engineering Engineering Index Engineering Journal (E.I.C.) Engineering News Record Englische Studien

Annals

English Historical Review Entomological Society of America: Fortschritte der Mineralogie, Krystallographie und Petrographie

General Electric Review Geographical Journal Geographical Review Geological Magazine Germanic Review Gramophone Greece and Rome

Harvard Economic Service: Review of Economic Statistics Harvard Studies in Classical Philology Heating, Piping and Air Conditioning Hesparia Hibbert Journal History

Illustration Industrial and Engineering Chemistry Institute Journal International Conciliation International Index to Periodicals International Journal of Ethics

Jahrbucher fur wissenschaftliche Botanik Jahresbericht uber de wissenschaftlichen Erscheinungen auf dem Gebeite der neuren deutschen Literatur Japanese Journal of Physics (National

Research Council of Japan) Johns Hopkins University Circular

Journal Asiatique

Journal de Mathématiques Journal de Pharmacie et de Chimie

Journal de Physique

Journal of Agricultural Research Journal of Biological Chemistry

Journal of Ecology

Journal of Economic and Business History

Journal of Education

Journal of Educational Psychology Journal of English and Germanic

Philology Journal of Experimental Zoology

Journal of Geology Journal of Mammalogy Journal of Paleontology Journal of Parasitology

Journal of Philosophy

Journal of Physical Chemistry Journal of Political Economy

Journal of Sedimentary Petrology Journal of the American Chemical Society Journal of the American Oriental Society Journal of the American Waterworks

Association

Journal of the Canadian Bankers' Association

Journal of the Chemical Society

Journal of the Elisha Mitchell Scientific Society

Journal of the Indian Institute of Science Journal of the Institute of Actuaries Journal of the Institute of Actuaries

Students' Society Journal of the Institute of Electrical

Engineers Journal of the New England Water Works Association

Journal of the Royal Aeronautical Society Journal of the Royal Asiatic Society Journal of the Royal Astronomical Society of Canada

Journal of the Royal Institute of British Architects

Journal of the Royal Microscopical Society Journal of the Society of Chemical

Industry Journal of the Western Society of

Engineers Justus Liebig's Annalen der Chemie

Klassieke Bibliographie

Labour Gazette Land and Freedom Liberté Library Journal Literatur London and Cambridge Economic Service: Monthly Bulletin

London and Cambridge Economic Service: Special Memorandum

Manitoba, University of: Quarterly Manitoba Free Press (morning) Manitoba Gazette Manitoban Mathematical Gazette Mathematische Annalen Mechanical World Memoirs of the Geological Survey of Canada Mercure de France Michigan, University of: Occasional Papers of the Museum of Zoology Mind Minnesota History Model Maker Modern Language Journal Modern Language Notes Modern Language Review Modern Philology Monatshhefte fur deutschen Unterricht Monist Monthly Evening Sky Map Monthly Labor Review Monthly Notices of the Royal Astronomical Society

Nation Nationaliste et le Devoir National Research Council of Canada: Canadian Journal of Research National Tax Association: Proceedings Natural History Nature Neue Rundschau New Phytologist Nineteenth Century and After North American Flora Notes and Queries Nouvelles Litéraires

Observatory Ontario Library Review Ontario: Hydro-Electric Power Commission: Bulletin

Orientalistische Literaturzeitung Ottawa: Review de l'Université d'

Pan-American Geologist Pencil Points Petite Illustration Pharmaceutical Journal Philological Quarterly Philologische Wochenschrift Philosophical Magazine Philosophical Review Philosophical Transactions of the Royal Society of London (Series A) Philosophical Transactions of the Royal Society of London (Series B) Philosophy Physical Review Physical Society of London: Proceedings Physikalische Zeitschrift Poetry of To-day Poetry Review Political Quarterly Political Science Quarterly Polytechnic Magazine Popular Astronomy Power Power Plant Engineering Proceedings of the Academy of Political Science Proceedings of the American Society for Testing Materials Proceedings of the Casualty Actuarial Society Proceedings of the Imperial Academy: Japan Proceedings of the Institute of Radio-

Engineers Proceedings of the Institution of Civil Engineers Proceedings of the London Mathematical

Society Proceedings of the National Academy of Sciences of the U.S.A.

Proceedings of the Royal Society (Series A) Proceedings of the Royal Society

(Series B) Proceedings of the Zoological Society of

London Psychological Review Public Administration Publications of the Dominion Astro-

physical Observatory

Publications of the Dominion Observatory Publications of the Modern Language Association of America

Quarterly Journal of Economics Quarterly Journal of Mathematics Quarterly Journal of Microscopical Science Quarterly Journal of Pharmacy Quarterly Journal of the Royal Meteorological Society Quarterly Journal of the University of North Dakota Quarterly Review of Biology Queen's Quarterly

Railway Age Railway Mechanical Engineer Readers' Guide to Periodical Literature

Refrigerating Engineering Review of Applied Entomology (Series A) Review of Applied Entomology (Series B) Review of English Studies Reviews of Modern Physics Revue de Géologie Revue de littérature comparée Revue de Métaphysique et de Morale Revue des Deux Mondes Revue d'Histoire de la Philosophie Revue d'Histoire littéraire de la France Revue Hebdomadaire Revue Historique Revue Scientifique Rhodora Romania Round Table Royal Architectural Institute of Canada: Journal Royal Institute of British Architects:

Royal Society of Canada: Proceedings

Journal

and Transactions

S.A.E. Journal School and Society Science Science Abstracts—Sec. A—Physics Scientific American Seasonable Hints: Eastern and B.C. Edition Seasonable Hints: Prairie Edition Shakespeare Association Bulletin Skandinaviska Kreditaktiebolaget Skindinaviska Kreditaktieoolaget
Smithsonian Miscellaneous Collections
Society for Pure English: Tracts
Society of Chemical Industry: Reports of
the Progress of Applied Chemistry Sociological Review Spectator (New York) Stain Technology Statistical Bulletin, Metropolitan Life Insurance Co. Studies in Philology

Times (London) Educational Supplement Times (London) Literary Supplement Times Weekly Edition Transactions of the Actuarial Society of America
Transactions of the American Institute of Electrical Engineers
Transactions of the American Mathematical Society
Transactions of the American Society of Civil Engineers
Transactions of the Engineering Institute of Canada
Transactions of the Faraday Society
Transactions of the Illuminating Engineering Society
Transactions of the Newcomen Society
Transactions of the Newcomen Society

United Empire
U.S. Bureau of Standards: Journal of
Research
United States Geological Survey: Bulletin,
and Water Supply Papers
University of Illinois Bulletin
University of Illinois Studies in Language
and Literature
University of Illinois Studies in the Social
Sciences
University of Iowa: Studies in Child
Welfare
University of New Brunswick: The
Brunswickian
University of Toronto Monthly
University of Wisconsin Studies in
Language and Literature

Valve World

Western Municipal News Western School Journal

Zeitschrift fur Botanik Zeitschrift fur Deutschkunde Zeitschrift fur Physik Zeitschrift fur Physikalische Chemie, A.B. Zoologica

# DEGREES GRANTED IN ARTS AND SCIENCE DIPLOMAS IN PHARMACY

From June 1st, 1932, to May 31st, 1933 (All as at May 17th, 1933, unless otherwise noted)

#### Bachelor of Arts

(General Course)

Ackland, Catherine Margaret Alpert, Morris Aaron Anderson, Sigrun Atchison, Clarence Edward Averbach, Sara Claire Baird, Helen Laurie Barbour, Margaret Inez (as at Mar. 16th, 1933) Bawlf, Robert Samuel Betts, Kathleen Esther (as at Mar. 16th, 1933) Birt, John Copus Black, George Montagu Bonnycastle, Joan Bornoff, George Bowles, Richard Spink Bowman, Allan Shafer Boyd, Mary Ramage Briggs, Roberta Broad, Myrtle Emma Eileen Brown, Arthur Foster Buggey, Lillian Ruth Burns, Margaret Mary Campbell, Marjorie Anna Cassidy, Mary Catherine (as at Sept. 15th, 1932) Cheyne, Kathleen Elizabeth Chodirkir, Niman Christie, Mabel Valdis Clarke, Constance Aileen Clarke, Ralph Barber Cooney, Maurice Joseph Corbett, William Alwyn Cousens, Grace (as at July 12th, Coutts, Winston Francis Craig, Marjorie Alice Crookes, Sydney Curle, Eldred Grace Curtis, Edward Hilton Daley, Margaret Agnes Dawson, Ben Thomas

Davidson, James I.

Davidson, Muriel Margaret

Davies, Vivian Lloyd (as at Mar. 16th, 1933) Denham, Sidney George (as at Sept. 15th, 1932) Dunsheath, Ward Dyker, Allan Lloyd Elliott, Marjorie Clarke Elvin, Ruth Beatrice Mary Embry, Ashton Fox Emerson, Courtney Rutherford Erb, Walter Jacob Fahey, Irene Marie (as at Mar. 16th, 1933) Forrest, Jessie Eveline Forster, Ora May Foster, Arthur Archibald Fraser, Constance Fraser, Dorothy Phare Fraser, Jean Adair Fuller, Gertrude Mary Galliot, Andree-Alix Gass, Muriel Jean Gay, Walter Peter Gibbons, Joyce Ginsberg, Harvey Disrael Goldstein Heloise Gordon, Marjorie Graham, Lyla Mary I. Green, Louis Hart (as at Sept. 15th, 1932) Greenaway, Archibald Gaylord Gregory, Evelyn Doris Haigh, William Arthur Hamilton Evelyn Handel, Doreen Bernice Harbottle, John Lauder Harder, Linda Ruth Harris, Aubrey Van Hecht, Anne Ruth Hestrin, Solomon (as at Mar. 16th, 1933) Hibbert, Handford Oswald (as at July 12th, 1932) Hodgson, Lorine Jean Gladys Horn, Helen Catherine Howlett, Edna Jessie

Hughes, Jack Shirley

Bachelor of Arts-Continued

Hunter, Jean Chalmers Irwin, Genevieve DuVal

Johnson, Gunnsteinn Gunnlaugur

(as at Mar. 16th, 1933)

Johnson, Ragna

Jordon, William Anthony

Jurzyniec, Felix

Kilgour, David Eckford

King, John Erlin

Krett, Alexandra

Kyle, Vivian Margaret Landreth, Wallace Johnston

Lane, Gwendolyn Jean

Lang, William Smithson MacKen-

zie

Levin, Bonnie

Loban, Ada Loree, Maurice Ray

Lovell, Irene

Ludwig, Jessie Helen

Lush, Erma Nadine

Lutes, Earl Leroy

McBride, Warren Leonard

McClellan, Grace Isabel McClure, Mary Nesbitt

McConnell, Mabel Almena McDonald, Mary Eileen McDougall, Roberta Elizabeth

McElroy, Marguerite Lillian

McInerney. Veronica Jane

McLean, Elsie Elizabeth

McMaster, Thomas Agnew (as at September 15th, 1932)

McMillan, Isobel Christine

McMillan, Jessie May (as at Mar.

16th, 1933)

McMurphy, Jack Archibald

MacDonald, Mary Alastair (as at

Mar. 16th, 1933)

MacKay, Katherine Edith

MacKay, Mary Jean

MacKenzie, Lillian Gertrude

MacMurchy, Christina (as at Mar.

16th, 1933)

MacPhail, Eleanor Annie

Magill, Helen Morrow

Medovy, Ida Vivian

Mezon, Esther Audrey (as at Sept.

15th, 1932)

Miller, Alice

Mitchell, Charles Harold

Mitchell, Phyllis Caroline

Moffett, Helen Blythe

Morrison, Alice Eileen

Morrison, Helen Evelyn

Morton, Helen Douglas Morton, Margaret

Murphy, Annie Mary

Murray, Hayward Gordon Stewart

Nixon, Margaret Helen

O'Brien, Edgar Austin

Offen, Constance Annie Onions, William George

Owens, Marion Jean McBain

Panar, Maisie

Perry, Vaughan Harvey

Pildrem, Margaret Elizabeth

Pipe, Horace Mervyn

Pope, Edward William Poole, Alice Elizabeth

Punter, Gerald Blanchflower

Quinlan, John Joseph

Remis, Leonard Lawrence

Rennie, Lillian MacKay

Rex, Edna May

Rintoul, John Warren

Ripstein, Zelma

Ross, Evelyn Florence

Ruhr, Casper Sigmund (as at Mar.

16th, 1933)

Schwartz, Lillian Arkin

Shanks, Mary Alice

Shaver, William Herman (as at

Mar. 16th, 1933)

Shaw, William MacKinley White Sigvaldason, John Peter (as at

Mar. 16th, 1933)

Simms, Eldon Franklin (as at Sept.

15th, 1932)

Sinclair, Kathleen Margaret

Sirluck, Glad Spence, Marjorie Berta

Sprung, George Mervyn Carter

Stark, Philip John

Stephens, Lillian Brae Stewart, Peter Renwick (as at

Sept. 15th, 1932)

Sutherland, Margaret Ruth

Tarr, Elizabeth Helen Templeton, Helen Annie Margaret

Thompson, Mary Allison Irene

Thompson, Winnifred Estelle

Thomson, Mary Elizabeth

Tod, Phyllis Elizabeth

Tryon, Victor Weld

Tuck, Helen Huntly

Turner, Robert Murray Sept. 15th, 1932)

Vaisrub, Daria

Vogel, Ruth Myrtle

Walker, Florence Janet

#### Bachelor of Arts-Continued

Ward, Winnifred Mary
Wells, Ruth Anderson
Whitteker, Clarice Jane Wilna
Wilder, Miriam Lillian
Williams, Clement Elmhirst
Williams, Mabel Gertrude
Willows, Fanny Hilda (as at Sept.
15th, 1932)
Wiznuk, Joseph
Wolkof, John Robert (as at Mar.
16th, 1933)
Wright, Thelma May

#### Bachelor of Arts

(Latin Philosophy)

Auger, Edward Leon
De Ruyck, Gerard
Jacques, Adrien Alphonse
Joubert, Joseph
La Riviere, Eugene Arthur Clement
Normandeu, Gerard
Reynolds, Joseph Benedict

#### Bachelor of Science

(General Course)

Atkins, Richard Carl Avery, Percy Carman (at at Mar. 16th, 1933) Avren, Sam Stanley Box, Gilbert Doud Browse, Robert Marks Bulman, Lilian Catherine Coleman, Morley Hillis Cottingham, Adrienne Josephine Earl, Grace Mary Havelock, Charles William Hawryluk, John Martin Jackman, Margaret Elizabeth Kohm, Samuel Walter (as at Sept. 15th, Korny, 1932) McAteer, Jessie Mae (as at Mar. 16th, 1933) McCracken, William Howard (as at Mar. 16th, 1933)

McIntosh, Russell Taylor McKenty, John Stewart Maley, Stephen Clement Marchant, Edwin Howard James (as at Mar. 16th, 1933) Margolese, Sheppard Jack (as at Mar. 16th, 1933) Martin, Mary Isobel Morrison, Lillie Elizabeth Noble, Alexander Norris, Marjorie Campbell Pastuck, Russell Phillips, Netanis Agnes Robinson, James Beryl Rosenthal, Sadye Janet Shaw, John Leslie Dickinson Simmons. Norman William Tisdale, Paul Kinley Truman, Mason Phelps

#### Bachelor of Arts

(Honors Course)

Bailey, Robert Christopher
Brock, Stanley Elmer
Easterbrook, William Thomas
James
Finegood, Max
Gracey, Gertrude Phyllis
Jones, William Duckworth
Lavender, Richard Evan
Loughead, George Yuill B.
McLuhan, Herbert Marshall
Malcomson, George Morton
Moscovitch, Nathan Abraham
Pierce, Glen Wallace
Pratt, Philip Creighton
Secord, Campbell Herbert
Slutsky, Nathan Allan

#### Bachelor of Science

(Honors Course)

Bragg, Leslie Grant
Johannson, Harold Gunnlauger
Paul
Johnson, Herman
McKillican, Mary Elizabeth
White, Ruth Mary

#### Master of Arts

Cox, Alexander, B.A., Manitoba, 1926. Major: Philosophy of Religion and Psychology of Religion. Minor: History of Ethics. Thesis: "Religious Belief and Moral Obligation."

Gillis, Sigfus Valdimar, B.A., Manitoba, 1929. Major: Physiological Optics. Minor: Advanced Electricity and Magnetism. Thesis:
"A Null Method of Photo-electric Polarimetry."

Hemphill, Ieleane Lillian Wastika, B.A., Manitoba, 1931. Major: English Language. Minor: English Literature. Thesis: "A Study of the Vocabulary of the Middle English Gospel of Nicodemus."

Ison, Francis James, B.A., Manitoba, 1927. Major: Political Economy. Minor: Political Science. Thesis: "The Functions of Organized Labor."

Manishen, Max, B.A., Manitoba, 1931. Major: The 17th Century as Depicted in Les Caracteres of La Bruyere. Minor: Les Lettres de Madame de Sevigne. Thesis: "La Bruyere Moraliste."

Moxon, Mary Caroline, Ph.B., Chicago, 1922. Major: General History and Theory of Education. Minor: Educational Administration and Special Methods. Thesis: "The Training of Teachers of Home Economics in Canada and in the States of the American Union adjacent to the Canadian Provinces." (As at Mar. 16th, 1933.)

Patterson, Howard Linklater, B.S. A., Manitoba, 1930. Major: Economic Theory. Minor: Agricultural Economics. Thesis: "Foreign Markets for Canadian Farm Products and their Relation to Agricultural Development in Western Canada."

Smaller, John Jacob Henry, B.A., Manitoba, 1930. Major: English Literature. Minor: English Language. Thesis: "The Arthurian Legend in Formation."

Stewart, Andrew, B.S.A., Manitoba, 1931. Major: Economic Theory. Minor: Agricultural Economics. Thesis: "The Dauphin District—A Study of the Growth, Development, and Existing Conditions in An Agricultural Community in Manitoba in 1929." (As at Mar. 16th, 1933.)

Tallin, Clive Kerslake, B.A. (Hons.),Manitoba, 1929. Major: GreekOrators. Minor: Roman Comedy.Thesis: "The Devolution of Estates in Attic Law."

Thierry, Maximilien Wauchope, B.A., (Hons.), Manitoba, 1932. Major: Political Economy. Minor: Political Science. Thesis: "Gold Prices and Monetary Reform."

#### Master of Arts

(ad eundem gradum)

Perry, Aaron Jenkins, M.A. (Yale), 1903.

#### Master of Science

- Ayre, Charles Alan, B.Sc. (Hons.), Manitoba, 1932. Major: Chemistry of Naturally Occurring Organic Compounds. Minor: Physical Chemistry in Relation to Medicine. Thesis: (1) "Self Condensation of Acetylacetone." (2) "The Action of Phenyl Isocyanate on Benzil."
- Bradley, Gertrude Lillian, B.Sc. (Hons), Manitoba, 1931. Major: Physics-Electronics. Minor: Physics-Quantum Theory. Thesis: "A Low Voltage Direct Current Amplifier."
- Brett, Edgar Wyman, B.S.A., Manitoba, 1916. Major: Agronomy-Advanced Genetics. Minor: Statistical Methods in Agronomic Research. Thesis: "Variations in the Panicle of Several Oat Varieties."
- Brown, Edith Margaret, B.Sc. (Hons.), Manitoba, 1931. Major: Hydrogen Ion Concentration. Minor: The Phase Rule. Thesis: "The Affinity Constant of Aniline in Water-Acetone Mixtures."
- Cohen, Harvey, B.Sc. (Hons.), Manitoba, 1932. Major: Chemistry of Naturally Occurring Organic Compounds. Minor: Poisonous Plants. Thesis: "A Study of Solanine and Some Experiments With Cocaine."
- Kidd, Howard Vincent, B.Sc., Manitoba, 1930. Major: Organic Chemistry. Minor: Theories of Solution. Thesis: "A Study of Methylene Quinone-oximes." (As at Mar. 16th, 1933.)
- Kuitunen, Ella Ekbaum, Dipl. Sc., Dorpat (Esthonia), 1928. Major: Parasitology. Minor: Embryology of Chordata. Thesis: "A Study of the Cestode Genus Eubothrium in Canadian Fishes." (As at Mar. 16th, 1933.)

- McGregor, James Arthur, B.S.A., Manitoba, 1923. Major: Agronomy-Advanced Genetics. Minor: Statistical Methods in Agronomic Research. Thesis: "Losses Due to Weeds in Several Crop Zones in Manitoba."
- McLeod, James Archie, B.Sc., Manitoba, 1931. Major: Parasitology. Minor: Bacteriology. Thesis: "A Parasitological Survey of the Ground Rodents in Manitoba."
- Moyse, Adele Victoria, B.Sc., Manitoba, 1931. Major: A Critical Study of Algae. Minor: Soils of Manitoba. Thesis: "Soil Algae of Manitoba."
- Richman, Hyman Isadore, B.Arch., Manitoba, 1932. Major: Advanced Architectural Design. Minor: Modelling and History of Painting and Sculpture. Thesis: "An Architect's Building—Plans, Elevation, Sections and Details."
- Rogerson, Edward William, B.Arch., Manitoba, 1932. Major: Advanced Architectural Design. Minor: Modelling and History of Painting and Sculpture. Thesis: "An Architect's Building—Plans, Elevation, Sections and Details."
- Sheets, William Elmer, B.Arch., Manitoba, 1932. Major: Advanced Architectural Design. Minor: Modelling and History of Painting and Sculpture. Thesis: "An Architect's Building—Plans, Elevation, Sections and Details."
- Slotin, Louis, B.Sc. (Hons.), Manitoba, 1932. Major: The Phase Rule. Minor: The Quantum Theory. Thesis: "The Systems: (1) Lithium-d-tartrate, ammonium-d-tartrate, water; (2) Lithium ammonium-d-tartrate, lithium ammonium-l-tartrate, water."

#### Master of Science-Continued

Smedley, Enid Mary, B.Sc. (Hons.), Manitoba, 1931. Major: Parasitology. Minor: Embryology of Chordata. Thesis: "A Partial Survey of the Nematode Parasites of Canadian Marine and Fresh Water Fishes."

Solomon, Ernest, B.Sc., Manitoba, 1930. Major: Cereal Chemistry. Minor: Colloid Chemistry. Thesis: "The Preparation of Fatty Acids Susceptible to Oxidation and a Study of the Variables Influencing Iodine Number Determinations."

Tildesley, William Thomas, B.S.A., Manitoba, 1931. Major: Genetics and Cytology of Forage Crops. Minor: Statistical Methods in Agronomic Research. Thesis: "Seasonal Variation in Food Reserves in Underground Parts of S. Arvensis and A. Repens."

Wallace, Sadie Ethelyn, B.Arch., Manitoba, 1932. Major: Advanced Architectural Design. Minor: Modelling and History of Painting and Sculpture. Thesis: "An Architect's Building—Plans, Elevation, Sections and Details."

Whiteman, Robert, B.S.A., Manitoba, 1912. Major: Agronomy. Minor: Statistical Methods in Agronomic Research. Thesis: "The Relative Value of Early and Late Varieties of Corn for Manitoba."

#### Diploma in Pharmacy

Bezkorowyny, Michel Eades, Frederick William Garnett, Harold Russell Hawksworth, Eric Keenberg, Louis Kronson, Philip McGill, Robert Maxwell Migicovsky, Baral Pearlman, Sidney Joseph Posner, Samuel Lewis Rafferty, Harold James Reid, David Harold Shenkarov, Louis Edward Shields, George Thomas Stokes, Alfred James Tedford, Douglas Alexander Zeal. Charles

# **REGISTER OF STUDENTS, 1932-1933**

N.B.—Under the heading "College," U represents University; St. B., St. Boniface College; St. J., St. John's College; St. P., St. Paul's College; W., Wesley College; A. I., Approved Outside Instruction; X-M, Extra-Mural. Where the student received instruction at more than one institution, this is indicated.

## JUNIOR DIVISION IN ARTS AND SCIENCE

#### First Year

College Address

Name

Ackland Clifford N. (U) Winnipeg Adamson, Eva M. (U) Winnipeg Adie, Jack T. (W) Norwood, Man. Alexander, Robert B. (U) Winnipeg Allen, Cameron S. (W) Winnipeg Allen, Hugh W. (W) Winnipeg Amos, Robert B. (W U) Russell, Man. Anderson, William B. (St. J) Winnipeg Andrews, Wesley J. (St. J U) Blacdale, Man. Anning, Catherine P. M. (W) Winnipeg Argyle, Frances M. (W) Winnipeg Arnason, Einar (U) Oakpoint, Man. Ashton, Beatrice R. (St. J) Winnipeg Badger, Thomas M. (W) Winnipeg Bajurny, Frank (U) Winnipeg Balderstone, Ada M. (St. J) Minnipeg Balderstone, Ada M. (St. J) Minnipeg Baldwin, Clarence C. (U) Winnipeg Barno, John J. (W) Winnipeg Baskerville, John E. (W) Edwardsville, Pa. Barry, Eileen (U) Winnipeg Beattie, Mildred I. (U) Winnipeg Beattie, Mildred I. (U) Winnipeg Beetts, Harry J. (U) Winnipeg Billinkoff, Adele (U) Winnipeg Bisset, Peter S. (W) Winnipeg Black, Gordon, F. (U) Winnipeg Black, Gordon, F. (U) Winnipeg Black, Gordon, F. (U) Winnipeg	Name	College	Address
Adamson, Eva M. (U) Winnipeg Adie, Jack T. (W) Norwood, Man. Alexander, Robert B. (U) Winnipeg Allen, Cameron S. (W) Winnipeg Allen, Hugh W. (W) Winnipeg Amos, Robert B. (W U) Russell, Man. Anderson, William B. (St. J) Winnipeg Andrews, Wesley J. (St. J U) Blacdale, Man. Anning, Catherine P. M. (W) Winnipeg Argyle, Frances M. (W) Winnipeg Argyle, Frances M. (W) Winnipeg Arnason, Einar (U) Oakpoint, Man. Ashman, Ralph (W U) E. St. Paul, Man. Ashman, Ralph (W U) E. St. Paul, Man. Ashton, Beatrice R. (St. J) Winnipeg Badger, Thomas M. (W) Winnipeg Badger, Maurice F. (W U) Winnipeg Baker, Maurice F. (W U) Winnipeg Baker, Maurice F. (W U) Winnipeg Baldwin, Bernice J. (W) Winnipeg Baldwin, Clarence C. (U) Winnipeg Barno, John J. (W) Edwardsville, Pa. Barry, Eileen (U) Winnipeg Baskerville, John E. (W U) Winnipeg Baerdsley, James E. (St. J U) Winnipeg Beardsley, James E. (St. J U) Winnipeg Berjansky, Cecil A. (U) Winnipeg Betts, Harry J. (U) Winnipeg Billinkoff, Adele (U) Winnipeg Bishop, Viola G. (U) Winnipeg Bishop, Viola G. (U) Winnipeg Bisset, Peter S. (W) Winnipeg	Ackland Clifford N.	(U)	Winnipeg
Adie, Jack T.  Alexander, Robert B.  Allen, Cameron S.  Allen, Hugh W.  Anos, Robert B.  Anderson, William B.  Anderson, William B.  Anning, Catherine P. M.  Antenbring, Stanley V.  Argyle, Frances M.  Ashman, Ralph  Ashton, Beatrice R.  Averback, Max  Badger, Thomas M.  Baldwin, Clarence C.  Bandeen, William R.  Baldwin, Clarence C.  Barry, Eileen  Barry, Eileen  Basyly, Alan M.  Beardsley, James E.  Bersford, Richard G.  Berjansky, Cecil A.  Bishop, Viola G.  Bisset, Peter S.  (W)  Winnipeg  Winnipeg  Winnipeg  Norwick, Max  (W)  Winnipeg  Balderstone, Ada M.  Baldwin, Clarence C.  Winnipeg  Bashery, Winnipeg  Bashery, Winnipeg  Bashery, Alexander  Winnipeg  Winnipeg  Winnipeg  Winnipeg  Winnipeg  Bashery, Carence C.  Winnipeg  Bashery, Winnipeg  Bashery, Carence C.  Winnipeg  Bashery, Winnipeg  Bashery, Carence C.  Winnipeg  Bashery, Cecil A.  Winnipeg  Bersford, Richard G.  Winnipeg  Bernstein, Sara S.  Winnipeg  Bernstein, Sara S.  Winnipeg	Adamson, Eva M.	(U)	Winnipeg
Alexander, Robert B. Allen, Cameron S. Allen, Hugh W. Amos, Robert B. Anderson, William B. Anderson, William B. Andrews, Wesley J. Anning, Catherine P. M. Antenbring, Stanley V. Argyle, Frances M. Ashman, Ralph Ashton, Beatrice R. Averback, Max Bajurny, Frank Baker, Maurice F. Balderstone, Ada M. Baldwin, Bernice J. Baldwin, Clarence C. Bandeen, William R. Barry, Eileen Baskerville, John E. Bardsley, James E. Beersford, Richard G. Berjansky, Cecil A. Bilshop, Viola G. Bisset, Peter S. Bisset, Peter S. Winnipeg Bisney, Viola G. Bisset, Peter S. Winnipeg	Adie, Jack T.	(W)	Norwood, Man.
Allen, Cameron S.  Allen, Hugh W.  Allen, Hugh W.  Amos, Robert B.  Anderson, William B.  Andrews, Wesley J.  Antenbring, Stanley V.  Argyle, Frances M.  Ashman, Ralph  Ashton, Beatrice R.  Averback, Max  Balgurny, Frank  Balderstone, Ada M.  Baldwin, Bernice J.  Bandeen, William R.  Barno, John J.  Barry, Eileen  Baskerville, John E.  Barshery, James E.  Beresford, Richard G.  Berjansky, Cecil A.  Belts, Harry J.  Bishop, Viola G.  Bisset, Peter S.  (W U) Russell, Man.  (W) Winnipeg  (W U) E. St. Paul, Man.  (W) Winnipeg	Alexander, Robert B.	(U)	Winnipeg
Amos, Robert B. Anderson, William B. Andrews, Wesley J. Anning, Catherine P. M. Antenbring, Stanley V. Argyle, Frances M. Ashman, Ralph Ashton, Beatrice R. Averback, Max Bajurny, Frank Baker, Maurice F. Balderstone, Ada M. Baldwin, Bernice J. Barry, Eileen Barry, Eileen Baskerville, John E. Bayly, Alan M. Beardsley, James E. Berjansky, Cecil A. Beith Ralph Brice Billinkoff, Alexander Bilshop, Viola G. Bisset, Peter S.  (W U) Blacdale, Man. (W) Winnipeg	Allen, Cameron S.	(W)	Winnipeg
Amos, Robert B. Anderson, William B. Andrews, Wesley J. Anning, Catherine P. M. Antenbring, Stanley V. Argyle, Frances M. Ashman, Ralph Ashton, Beatrice R. Averback, Max Bajurny, Frank Baker, Maurice F. Balderstone, Ada M. Baldwin, Bernice J. Barry, Eileen Barry, Eileen Baskerville, John E. Bayly, Alan M. Beardsley, James E. Berjansky, Cecil A. Beith Ralph Brice Billinkoff, Alexander Bilshop, Viola G. Bisset, Peter S.  (W U) Blacdale, Man. (W) Winnipeg	Allen, Hugh W.	(W)	Winnipeg
Anderson, William B. (St. J) Winnipeg Andrews, Wesley J. (St. J U) Blacdale, Man. Anning, Catherine P. M. (W) Winnipeg Antenbring, Stanley V. (U) Winnipeg Argyle, Frances M. (W) Winnipeg Arnason, Einar (U) Oakpoint, Man. Ashman, Ralph (W U) E. St. Paul, Man. Ashton, Beatrice R. (St. J) Winnipeg Badger, Thomas M. (W) Winnipeg Bajurny, Frank (U) Winnipeg Baker, Maurice F. (W U) Winnipeg Balderstone, Ada M. (St. J) Middlechurch, Man. Baldwin, Bernice J. (W) Winnipeg Baldwin, Clarence C. (U) Winnipeg Barno, John J. (W) Edwardsville, Pa. Barry, Eileen (U) Winnipeg Baskerville, John E. (W U) Winnipeg Baskerville, John E. (W U) Winnipeg Beardsley, James E. (St. J U) Winnipeg Beartie, Mildred I. (U) Winnipeg Bersford, Richard G. (U) Winnipeg Bernstein, Sara S. (U) Winnipeg Bernstein, Sara S. (U) Winnipeg Billinkoff, Adele (U) Winnipeg Billinkoff, Alexander Bishop, Viola G. (U) Winnipeg Bisset, Peter S. (W) Winnipeg	Amos, Robert B.	(Ŵ U)	Russell, Man.
Andrews, Wesley J.  Anning, Catherine P. M.  Antenbring, Stanley V.  Argyle, Frances M.  Wy Winnipeg  Arnason, Einar  Ashman, Ralph  Ashton, Beatrice R.  Averback, Max  Uy Winnipeg  Badger, Thomas M.  Bajurny, Frank  Bajurny, Frank  Balderstone, Ada M.  Baldwin, Bernice J.  Baldwin, Clarence C.  Bandeen, William R.  Barno, John J.  Barry, Eileen  Barry, Eileen  Baskerville, John E.  Bayly, Alan M.  Beardsley, James E.  Beattie, Mildred I.  Berjansky, Cecil A.  Uy Winnipeg  Bell, Jerrold W.  Bernstein, Sara S.  Uy Winnipeg  Bellinkoff, Adele  Billinkoff, Adele  Billinkoff, Alexander  Bishop, Viola G.  Bisset, Peter S.  Winnipeg			
Anning, Catherine P. M.  Antenbring, Stanley V.  (U) Winnipeg Argyle, Frances M.  (W) Winnipeg Arnason, Einar  (U) Oakpoint, Man.  Ashman, Ralph  (W U) E. St. Paul, Man.  Ashton, Beatrice R.  (St. J) Winnipeg Badger, Thomas M.  (W) Winnipeg Balderstone, Ada M.  Baldwin, Bernice J.  Bandeen, William R.  Barno, John J.  Barry, Eileen  Baskerville, John E.  Beattle, Mildred I.  Beardsley, James E.  Beattle, Mildred G.  Bernstein, Sara S.  Betts, Harry J.  Billinkoff, Adele Bilr, Thomas W.  Bishop, Viola G.  Bisset, Peter S.  (W) Winnipeg	Andrews, Wesley J.	(St.J.II)	Blacdale Man
Antenbring, Stanley V.  Argyle, Frances M.  Arnason, Einar  Ashman, Ralph  Ashton, Beatrice R.  Averback, Max  Bajurny, Frank  Balderstone, Ada M.  Baldwin, Bernice J.  Bandeen, William R.  Barry, Eileen  Baskerville, John E.  Bayly, Alan M.  Beardsley, James E.  Beattie, Mildred I.  Bernstein, Sara S.  Betts, Harry J.  Billinkoff, Adele  Bilnkoff, Adele  Bishop, Viola G.  Bishop, Viola G.  Bishden, Wunnipeg  Wunnipeg  Winnipeg	Anning, Catherine P. M.	(W)	Winnipeg
Argyle, Frances M. (W) Winnipeg Arnason, Einar (U) Oakpoint, Man. Ashman, Ralph (W U) E. St. Paul, Man. Ashton, Beatrice R. (St. J) Winnipeg Badger, Thomas M. (U) Winnipeg Baker, Maurice F. (W U) Winnipeg Balderstone, Ada M. (St. J) Middlechurch, Man. Baldwin, Bernice J. (W) Winnipeg Baldwin, Clarence C. (U) Winnipeg Barno, John J. (W) Edwardsville, Pa. Barry, Eileen (U) Winnipeg Baskerville, John E. (W U) Winnipeg Baskerville, John E. (W U) Winnipeg Beattie, Mildred I. (U) Winnipeg Berjansky, Cecil A. (U) Winnipeg Betts, Harry J. (U) Winnipeg Billinkoff, Adele (U) Winnipeg Billinkoff, Adele (U) Winnipeg Bisset, Peter S. (W) Winnipeg Bisset, Pater S. (W) Winnipeg Bisset, Peter S. (W) Winnipeg	Antenbring, Stanley V.	(U)	Winnipeg
Arnason, Einar Ashman, Ralph Ashton, Beatrice R. Averback, Max Badger, Thomas M. Baldwin, Bernice J. Baldwin, Clarence C. Bandeen, William R. Barry, Eileen Baskerville, John E. Beardsley, James E. Bell, Jerrold W. Beresford, Richard G. Berjansky, Cecil A. Bers Bers Bers Bers Billinkoff, Adele Billinkoff, Adele Billinkoff, Adele Bilshop, Viola G. Bishop, Viola G. Bishop, Viola G. Bishden, Wilnipeg Bishden, Wilnipeg Bishden, William R. Bers G.	Argyle, Frances M.	(W)	Winnipeg
Ashman, Ralph Ashton, Beatrice R. Averback, Max Badger, Thomas M. Bajurny, Frank Baker, Maurice F. Balderstone, Ada M. Baldwin, Bernice J. Barno, John J. Barry, Eileen Baskerville, John E. Bayly, Alan M. Beardsley, James E. Beattie, Mildred I. Berjansky, Cecil A. Bernstein, Sara S. Betts, Harry J. Bilnkoff, Alexander Bilnkoff, Alexander Bilnkoff, Alexander Bishop, Viola G. Bisset, Peter S.  Winnipeg	Arnason, Einar	(U)	Oakpoint, Man.
Ashton, Beatrice R.  Averback, Max  (U) Winnipeg  Badger, Thomas M.  (W) Winnipeg  Bajurny, Frank  Baker, Maurice F.  Balderstone, Ada M.  Baldwin, Bernice J.  Bandeen, William R.  Barno, John J.  Barry, Eileen  Baskerville, John E.  Beardsley, James E.  Beattie, Mildred I.  Berjansky, Cecil A.  Bernstein, Sara S.  Betts, Harry J.  Bilhon F.  Bilhon F.  Cyb Winnipeg  Bershop, Viola G.  Cyb Winnipeg  Cyb W	Ashman, Ralph	(W U)	E. St. Paul, Man.
Averback, Max  Badger, Thomas M.  (W) Winnipeg Bajurny, Frank (U) Winnipeg Baker, Maurice F. (W U) Winnipeg Balderstone, Ada M. (St. J) Middlechurch, Man. Baldwin, Bernice J. (W) Winnipeg Baldwin, Clarence C. (U) Winnipeg Bandeen, William R. (W U) Winnipeg Barno, John J. (W) Edwardsville, Pa. Barry, Eileen (U) Winnipeg Baskerville, John E. (W U) Winnipeg Baskerville, John E. (W U) Winnipeg Beardsley, James E. (St. J U) Winnipeg Beattie, Mildred I. (U) Winnipeg Berjansky, Cecil A. (U) Winnipeg Bernstein, Sara S. (U) Winnipeg Betts, Harry J. (U) Winnipeg Billinkoff, Adele (U) Winnipeg Billinkoff, Alexander (U) Winnipeg Birt, Thomas W. (W) Winnipeg Bishop, Viola G. (U) Winnipeg Bisset, Peter S.	Ashton, Beatrice R.	(St. J)	Winnipeg
Badger, Thomas M. (W) Winnipeg Bajurny, Frank (U) Winnipeg Baker, Maurice F. (W U) Winnipeg Balderstone, Ada M. (St. J) Middlechurch, Man. Baldwin, Bernice J. (W) Winnipeg Baldwin, Clarence C. (U) Winnipeg Bandeen, William R. (W U) Winnipeg Barno, John J. (W) Edwardsville, Pa. Barry, Eileen (U) Winnipeg Baskerville, John E. (W U) Winnipeg Baskerville, John E. (W U) Winnipeg Bayly, Alan M. (U) Winnipeg Beardsley, James E. (St. J U) Winnipeg Beattie, Mildred I. (U) Winnipeg Bell, Jerrold W. (U) Winnipeg Bersford, Richard G. (U) Winnipeg Berjansky, Cecil A. (U) Winnipeg Bernstein, Sara S. (U) Winnipeg Betts, Harry J. (U) Winnipeg Betts, Harry J. (U) Winnipeg Billinkoff, Adele (U) Winnipeg Billinkoff, Alexander (U) Winnipeg Birt, Thomas W. (W) Winnipeg Bishop, Viola G. (U) Winnipeg Bisset, Peter S. (W) Winnipeg	Averback, Max	(U)	Winnipeg
Bajurny, Frank Baker, Maurice F. Balderstone, Ada M. Baldwin, Bernice J. Bandeen, William R. Barno, John J. Barry, Eileen Baskerville, John E. Bayly, Alan M. Beardsley, James E. Beattie, Mildred I. Bell, Jerrold W. Bersford, Richard G. Berjansky, Cecil A. Bersford, Radele Billinkoff, Adele Billinkoff, Alexander Bishop, Viola G. Billinkoff, Note Minnipeg Bisset, Peter S. W U) Winnipeg W U) Winnipeg	Badger, Thomas M.	(W)	Winnipeg
Baker, Maurice F.  Balderstone, Ada M.  Baldwin, Bernice J.  Baldwin, Clarence C.  Bandeen, William R.  Barno, John J.  Barry, Eileen  Baskerville, John E.  Beardsley, James E.  Beattie, Mildred I.  Bell, Jerrold W.  Berjansky, Cecil A.  Berjansky, Cecil A.  Bernstein, Sara S.  Billinkoff, Adele  Billinkoff, Alexander  Bishop, Viola G.  Baldwin, Clarence C.  (W)  Winnipeg  Wu)  Winnipeg  Wu)  Winnipeg  Wu)  Winnipeg	Bajurny, Frank	(U)	Winnipeg
Balderstone, Ada M. (St. J) Middlechurch, Man. Baldwin, Bernice J. (W) Winnipeg Baldwin, Clarence C. (U) Winnipeg Bandeen, William R. (W U) Winnipeg Barno, John J. (W) Edwardsville, Pa. Barry, Eileen (U) Winnipeg Baskerville, John E. (W U) Winnipeg Baskerville, John E. (W U) Winnipeg Baskerville, John E. (U) Winnipeg Beardsley, James E. (St. J U) Winnipeg Beattie, Mildred I. (U) Winnipeg Bell, Jerrold W. (U) Winnipeg Beresford, Richard G. (U) Winnipeg Berjansky, Cecil A. (U) Winnipeg Bernstein, Sara S. (U) Winnipeg Betts, Harry J. (U) Winnipeg Billinkoff, Adele (U) Winnipeg Billinkoff, Alexander (U) Winnipeg Billinkoff, Alexander (U) Winnipeg Birt, Thomas W. (W) Winnipeg Bishop, Viola G. (U) Winnipeg Bisset, Peter S. (W) Winnipeg	Baker, Maurice F.	(W U)	Winnipeg
Baldwin, Clarence C.  Bandeen, William R.  Barno, John J.  Barry, Eileen  Baskerville, John E.  Beardsley, James E.  Beattie, Mildred I.  Berjansky, Cecil A.  Bernstein, Sara S.  Bernstein, Sara S.  Bellinkoff, Adele  Billinkoff, Alexander  Bishop, Viola G.  Barry, Eileen  (W U) Winnipeg  Edwardsville, Pa.  Wu U) Winnipeg  Wu U) Winnipeg  Winnipeg  Winnipeg  Burnstein, Sara S.  (U) Winnipeg	Balderstone, Ada M.	(St. J)	Middlechurch, Man.
Baldwin, Clarence C.  Bandeen, William R.  Barno, John J.  Barry, Eileen  Baskerville, John E.  Beardsley, James E.  Beattie, Mildred I.  Berjansky, Cecil A.  Bernstein, Sara S.  Bernstein, Sara S.  Bellinkoff, Adele  Billinkoff, Alexander  Bishop, Viola G.  Barry, Eileen  (W U) Winnipeg  Edwardsville, Pa.  Wu U) Winnipeg  Wu U) Winnipeg  Winnipeg  Winnipeg  Burnstein, Sara S.  (U) Winnipeg	Baldwin, Bernice J.	(W)	Winnipeg
Bardeen, William R. (W U) Winnipeg Barno, John J. (W) Edwardsville, Pa. Barry, Eileen (U) Winnipeg Baskerville, John E. (W U) Winnipeg Bayly, Alan M. (U) Winnipeg Beattle, Mildred I. (U) Winnipeg Bell, Jerrold W. (U) Winnipeg Beresford, Richard G. (U) Winnipeg Berjansky, Cecil A. (U) Winnipeg Bernstein, Sara S. (U) Winnipeg Betts, Harry J. (U) Winnipeg Billinkoff, Adele (U) Winnipeg Billinkoff, Alexander (U) Winnipeg Birt, Thomas W. (W U) Winnipeg Bishop, Viola G. (U) Winnipeg Bisset, Peter S. (W) Winnipeg	Baldwin, Clarence C.	(U)	Winnipeg
Barno, John J. (W) Edwardsville, Pa. Barry, Eileen (U) Winnipeg Baskerville, John E. (W U) Winnipeg Bayly, Alan M. (U) Winnipeg Beatdsley, James E. (St. J U) Winnipeg Beattie, Mildred I. (U) Winnipeg Bell, Jerrold W. (U) Winnipeg Beresford, Richard G. (U) Winnipeg Berjansky, Cecil A. (U) Winnipeg Bernstein, Sara S. (U) Winnipeg Betts, Harry J. (U) Winnipeg Billinkoff, Adele (U) Winnipeg Billinkoff, Alexander (U) Winnipeg Birt, Thomas W. (W U) Winnipeg Bishop, Viola G. (U) Winnipeg Bisset, Peter S. (W) Winnipeg	Bandeen, William R.	(W IJ)	Winnipeg
Barry, Eileen  Baskerville, John E.  Bayly, Alan M.  Beardsley, James E.  Bell, Jerrold W.  Beresford, Richard G.  Berjansky, Cecil A.  Bernstein, Sara S.  Betts, Harry J.  Bellinkoff, Adele  Billinkoff, Alexander  Birt, Thomas W.  Baskerville, John E.  Wull Winnipeg	Barno, John J.	(W)	Edwardsville, Pa.
Baskerville, John E. (W U) Winnipeg Bayly, Alan M. (U) Winnipeg Beardsley, James E. (St. J U) Winnipeg Beattie, Mildred I. (U) Winnipeg Bell, Jerrold W. (U) Winnipeg Beresford, Richard G. (U) Winnipeg Berjansky, Cecil A. (U) Winnipeg Bernstein, Sara S. (U) Winnipeg Betts, Harry J. (U) Winnipeg Billinkoff, Adele (U) Winnipeg Billinkoff, Alexander (U) Winnipeg Bingeman, Elizabeth (W) Winnipeg Birt, Thomas W. (W U) Winnipeg Bishop, Viola G. (U) Winnipeg Bisset, Peter S. (W) Winnipeg	Barry, Eileen	(U)	Winnipeg
Bayly, Alan M. (U) Winnipeg Beardsley, James E. (St. J U) Winnipeg Beattie, Mildred I. (U) Winnipeg Bell, Jerrold W. (U) Winnipeg Beresford, Richard G. (U) Winnipeg Berjansky, Cecil A. (U) Winnipeg Bernstein, Sara S. (U) Winnipeg Betts, Harry J. (U) Winnipeg Billinkoff, Adele (U) Winnipeg Billinkoff, Alexander (U) Winnipeg Bingeman, Elizabeth (W) Winnipeg Birt, Thomas W. (W U) Winnipeg Bishop, Viola G. (U) Winnipeg Bisset, Peter S. (W) Winnipeg	Baskerville, John E.	(W IJ)	Winnipeg
Beardsley, James E. (St. J U) Winnipeg Beattie, Mildred I. (U) Winnipeg Bell, Jerrold W. (U) Winnipeg Beresford, Richard G. (U) Winnipeg Berjansky, Cecil A. (U) Winnipeg Bernstein, Sara S. (U) Winnipeg Betts, Harry J. (U) Winnipeg Billinkoff, Adele (U) Winnipeg Billinkoff, Alexander (U) Winnipeg Bingeman, Elizabeth (W) Winnipeg Birt, Thomas W. (W) Winnipeg Bishop, Viola G. (U) Winnipeg Bisset, Peter S. (W) Winnipeg	Bayly, Alan M.	(II)	Winnipeg
Beattie, Mildred I. (U) Winnipeg Bell, Jerrold W. (U) Winnipeg Beresford, Richard G. (U) Winnipeg Berjansky, Cecil A. (U) Winnipeg Bernstein, Sara S. (U) Winnipeg Betts, Harry J. (U) Winnipeg Billinkoff, Adele (U) Winnipeg Billinkoff, Alexander (U) Winnipeg Bingeman, Elizabeth (W) Winnipeg Birt, Thomas W. (W) Winnipeg Bishop, Viola G. (U) Winnipeg Bisset, Peter S. (W) Winnipeg	Beardsley, James E.	(St. J U	Winnipeg
Bell, Jerrold W. (U) Winnipeg Beresford, Richard G. (U) Winnipeg Berjansky, Cecil A. (U) Winnipeg Bernstein, Sara S. (U) Winnipeg Betts, Harry J. (U) Winnipeg Billinkoff, Adele (U) Winnipeg Billinkoff, Alexander (U) Winnipeg Billinkoff, Alexander (U) Winnipeg Bingeman, Elizabeth (W) Winnipeg Birt, Thomas W. (W) Winnipeg Bishop, Viola G. (U) Winnipeg Bisset, Peter S. (W) Winnipeg	Beattie, Mildred I.	(TJ)	Winnipeg
Beresford, Richard G. (U) Winnipeg Berjansky, Cecil A. (U) Winnipeg Bernstein, Sara S. (U) Winnipeg Betts, Harry J. (U) Winnipeg Billinkoff, Adele (U) Winnipeg Billinkoff, Alexander (U) Winnipeg Bingeman, Elizabeth (W) Winnipeg Birt, Thomas W. (W U) Winnipeg Bishop, Viola G. (U) Winnipeg Bisset, Peter S. (W) Winnipeg	Bell, Jerrold W.	(II)	Winnineg
Berjansky, Cecil A. (U) Winnipeg Bernstein, Sara S. (U) Winnipeg Betts, Harry J. (U) Winnipeg Billinkoff, Adele (U) Winnipeg Billinkoff, Alexander (U) Winnipeg Bingeman, Elizabeth (W) Winnipeg Birt, Thomas W. (W U) Winnipeg Bishop, Viola G. (U) Winnipeg Bisset, Peter S. (W) Winnipeg	Beresford, Richard G.	(U)	Winnipeg
Betts, Harry J. (U) Winnipeg Billinkoff, Adele (U) Winnipeg Billinkoff, Alexander (U) Winnipeg Bingeman, Elizabeth (W) Winnipeg Birt, Thomas W. (W U) Winnipeg Bishop, Viola G. (U) Winnipeg Bisset, Peter S. (W) Winnipeg	Berjansky, Cecil A.	(U)	Winnipeg
Billinkoff, Adele (U) Winnipeg Billinkoff, Alexander (U) Winnipeg Bingeman, Elizabeth (W) Winnipeg Birt, Thomas W. (W U) Winnipeg Bishop, Viola G. (U) Winnipeg Bisset, Peter S. (W) Winnipeg	Bernstein, Sara S.	(U)	Winnipeg
Billinkoff, Alexander (U) Winnipeg Bingeman, Elizabeth (W) Winnipeg Birt, Thomas W. (W U) Winnipeg Bishop, Viola G. (U) Winnipeg Bisset, Peter S. (W) Winnipeg	Betts, Harry J.	(U)	Winnipeg
Bingeman, Elizabeth (W) Winnipeg Birt, Thomas W. (W U) Winnipeg Bishop, Viola G. (U) Winnipeg Bisset, Peter S. (W) Winnipeg	Billinkoff, Adele	(U)	Winnipeg
Birt, Thomas W.       (W U)       Winnipeg         Bishop, Viola G.       (U)       Winnipeg         Bisset, Peter S.       (W)       Winnipeg	Billinkoff, Alexander	(U)	Winnipeg
Bishop, Viola G(U)Winnipeg Bisset, Peter S(W)Winnipeg	Bingeman, Elizabeth	(W)	Winnipeg
Bishop, Viola G(U)Winnipeg Bisset, Peter S(W)Winnipeg	Birt, Thomas W.	(W U)	Winnipeg
	Bishop, Viola G.	(U)	Winnipeg
Black, Gordon, F(U) Winnipeg			
	Black, Gordon, F.	(U)	Winnipeg

Name .	College	Address
Black, Islay-Ruth, M.	(W/)	Winnings
Black, Ralph F.	(II)	Winning
Bolton, Lloyd W.	(II)	Winning
Bond, Thomas R.	(II)	Winning
Booth, Beverly A.	(St T II)	Winning
Booth, Joseph	(W)	Dickons DO Man
Boroditsky, David	(TT)	Winning
Boroditsky, Louis	(TT)	Winning
Boult, George F.	(II)	Winning
Boychuk, Waldemar P.	(St DII)	Transcens Man
Boyd, Victor	(37.1	Transcona, Man.
Bracken, William G.	( VV )	winnipeg
Brandson, Thomas L.	(W U)	winnipeg
Bronnan Dorothy U	(Ct D)	winnipeg
Brennan, Dorothy H.	(St. B)	Winnipeg
Bridges, Edward C.	(St. J U)	Winnipeg
Briggs, Clarence A.	(W U)	Winnipeg
Briggs, Neil A.	(U)	Winnipeg
Brock, Jeffry V.	(St. J U)	Winnipeg
Brockie, William G.	(U)	Winnipeg
Broderick, Kathleen A.	(St. B)	Winnipeg
Bromberg, Wilfred	(U)	Winnipeg
Brown, Basil F.	(St. P)	Winnipeg
Brown, Ernest A.	(U)	Winnipeg
Brown, Isabel	(W)	Winnipeg
Brown, Richard A. C.	(W)	Winnipeg
Brown, Roy P.	(U)	Winnipeg
Brown, William H.	(U)	St. Vital, Man.
Bruder, Mary L.	(St. J U)	Winnipeg
Bugeresta, Jennie	(U)	Winnipeg
Burch, Edward T.	(St. P U)	Winnipeg
Burke-Gaffney, Thomas E.	(St. PU)	Winnipeg
Burley, Joseph Burmaster, Nellie M	(St. B)	Rolla, N.D.
Burmaster, Nellie M.	(W)	Winnipeg
Burt, Philip A.	(W U)	Winnipeg
Cadwell, Kathleen E.	(W)	Winnipeg
Calder, Ruth E.	(W)	Dominion City, Man.
Calnitsky, David A.	(U)	Winnipeg
Campbell, Alistair	(U)	Winnipeg
Campbell, Cleland A.	_ (W)	Winnipeg
Campbell, Evelyn B. S.	(W)	Winnipeg
Campbell, James S.	(U)	Winnipeg
Campbell, Percy C.	(St. J)	Transcona, Man.
Campbell, Walter G.	(U)	Winnipeg
Camsell, George C.	(St. J U)	E. Kildonan, Man.
Cassidy, Clifford	(St. J U)	Winnipeg
Cembroski, Joseph H.	(St. P U)	Headingly, Man
Chapman, Clarence V.	(U)	Winnineg
Chernick, Harry	(U)	Winnineg
Chernick, Jack		
Chipman, Emily C.	(II)	Winnineg
Chisick, Charles	(II)	Winnineg
Chmelnitsky, Jack		
Clack, Leslie C.	(St.T)	Winnines
Clark, Janet A.		
Cochrane, Gordon R.	(WII)	Brandon Man
Cocinaire, Gordon 16.	( )	Dianaon, Man.

Name	College	Address
Cohen, Sheila	(IJ)	Winnineg
Coleman, Rowan C.		
Collyer, M. Leigh	_(St. J U)	Winnineg
Coo, Lillian C.	_(W)	Winnineg
Cooney, Shelagh G.	(U)	Winnineg
Cormier, Maurice	(St. B)	St Norbert Man
Corne, Norman I.	(II)	Winning
Coulson, Charles J.	(W)	Winnines
Cowan, Margaret I.	(St. B)	Fort Garry Man
Coyne, Mary M.	(II)	Winning
Crabbe, Robert E.	(II)	Winnings
Cravits, Annastatia	(XM)	Winning
Crawford, Harry	(II)	Winning
Creasy, George I.	(AT)	Portago la Projeja Man
Creba, John F.	(W)	Winning
Crombie, Gordon P.	(747)	Winning
Crossland, John M.	(II)	Sto Amolio Man
Currie, John W.	(AT)	Portogo la Projeja Man.
Currie, Robert M.	(II)	Naisam Cast
Curtis, Allan L.	(W/ II)	Doubhin Mar
Dailley, Gordon D.	(TT)	Winning
Dampier, Frank J.	(St T II)	Ninigan O-t
Davidson, Allan	(51. 5 0)	- Nipigon, Ont.
Davie, Audrey I.	(U)	winnipeg
Davies, Harold	(C+ T TT)	Winnipeg
Davis, M. Margaret	(St. J U)	winnipeg
Davison, Keith B.	(U)	Winnipeg
Davison, Retui B.	(St DII)	Winnipeg
Dawson, Patrick F.	(St. P U)	Winnipeg
Deagle, Finnan J.	(St. P)	Winnipeg
Delbridge, Lawrence M.	(U)	Winnipeg
Desrochers, Aime	(St. B)	Mariapolis, Man.
Devlin, Roland J.	(St. P)	Winnipeg
Dewar, Archibald S.	(W)	Winnipeg
Diamond, Max Y.	(U)	Winnipeg
Diss, Florence M.	(St. B)	Winnipeg
Dixon, William P.	(U)	Winnipeg
Dowdall, Arthur P.	(St. P)	Winnipeg
Draper, Walter G.	(St. J U)	Winnipeg
Dubois, Theophile	(U)	Winnipeg
Duchuk, Peter W.	(St. P U)	Transcona, Man.
Dugas, Dominique	(St. B)	Meyronne, Sask.
Dumans, Gertrude	(W)	Winnipeg
Duncan, Barrie P.	(U)	Eston, Sask.
Duncan, Dorothy L.	(AI)	Portage la Prairie, Man.
Duncan, James C.	(U)	Winnipeg
Duncan, Ruth M.	(W)	Winnipeg
Dunderdale, Thomas P.	(U)	Winnipeg
Dunelyk, Leonard W.	(St. P U)	Transcona, Man.
Edmondson, Donald M.	(W U)	Winnipeg
Ekman, Gretta I.	(U)	Winnipeg
Elliott, Gordon W. Ellison, Stephen C.	(W)	Winnipeg
Ellison, Stephen C.	(U)	Winnipeg
Elsworth, Margaret A.	(St. B)	Winnineg
Esdale, George M.	(U)	Winnipeg
Eyres, Winston C.	(U)	Winnipeg

Name	College	Address
Farley, Willet J.	_(W)	Winnipeg
Feavearyear, Alma H.	(U)	Winnipeg
Ferguson, John R.	(U)	Winnipeg
Filko, Alex	(U)	Winnipeg
Filko, Alex Findlay, John A. C.	(St. J)	Winnipeg
Findlay, John Anglin	(W)	Winnipeg
Fischook, William F.	(II)	Harte Man
Fiskin, Abram	(II W)	Winnineg
Flett, Robert	·(II)	Winnineg
Ford, George H.	(II)	Winnineg
Foster, Jack C.	(II)	Winnines
Franke, Margaret H.	(II)	Winnineg
Fraser, David B.	(W)	Kenton Man
Fretwell, Ruth E.	(777)	Winning
Fretweil, Ruth E.	(777)	Winning
Fryer, Gordon E.	(C+ D)	Winning
Gamble, George J.	(St. F)	Winning
Gant, R. Edythe Gardiner, Jessie T.	(St. J)	Eagle Birror Ont
Gardiner, Jessie T.	(W)	Eagle River, Ont.
Gardiner, Reginald M.	(W U)	Eagle River, Ont.
Garrow, Margaret I.	(W)	- Winnipeg
Gauer, Frederick H.	(U)	winnipeg
Gaynor, James P.	_ (W U)	Winnipeg
Gershfield, Max	(U)	Winnipeg
Gershfield, Sam B. Gibson, J. Clifford	(U)	Winnipeg
Gibson, J. Clifford	(U)	Winnipeg
Gillies, Grace D.	(St. J)	Winnipeg
Gold. James	(U)	Winnipeg
Goody, Henry	(U)	Winnipeg
Graham, Shirley C.	(W)	Winnipeg
Grant, Margaret M.	(U)	Winnipeg
Grant, Rae C. Green, Alex H.	(W U)	Winnipeg
Green, Alex H.	(St. J)	Winnipeg
Greene, Harold S.	(U)	Winnipeg
Greene, Ziona	_ (U)	Winnipeg
Gregory Winnifred I	(W)	Winnipeg
Gribbins, Gordon H.	(U)	Winnipeg
Grower, Sam	(U)	Winnipeg
Hamilton, James D.	(U)	Winnipeg
Hanford, Florence M. Hannesson, Margaret E.	(W)	Winnipeg
Hannesson, Margaret E.	(U)	Winnipeg
Harding, George M. Harland, Joan M.	(U)	Transcona, Man.
Harland, Joan M.	(St. B)	Winnipeg
Harrison, Lionel	(St. J)	Winnipeg
Harvschak, Mike	(U)	Winnipeg
Hastings, George V.	(IJ)	Winnipeg
Head, Maurice H.	(St. J)	Winnipeg
Heiland Alexander H.	(St. P)	Winnipeg
Heiland, Alexander H. Heinzelmann, Richard V. Hendin, Nate A.	(IJ)	Winnipeg
Hendin Nate A	(II)	Winnipeg
Hennesey, John C.	(W II)	Belmont, Man.
Henselwood, Edward W.	(St. J. II)	W. Kildonan, Man.
Heppner, John A. L.	(II W)	Winnipeg
Hermanson, Thelma M.	(II)	Winnipeg
Herriot, John G.	(II)	Winnineg
Hignell, Edward T.	(W)	Winnipeg
Iligitell, Edward 1.	( ) /	

Name	College	Address
Hill, Kathleen E.	(II)	Address
Holowinski, Joseph	(TT)	Winnipeg
Holtby, Stanley T.	(U)	Winnipeg
Horder, Lilian J.	(317)	Benito, Man.
Horne Hugh R	(W)	Winnipeg
Horne, Hugh R.	(W)	Winnipeg
Horne, Phyllis E.	(U)	Winnipeg
Howarth, Bill H.	(W U)	Winnipeg
Huggins, Charles J.	(St. P U)	Winnipeg
Hughes, Elwyn O.	(St. J)	Winnipeg
Hutchison, Dorothy A.	(W)	Winnipeg
rieland, James R.	(11)	Winnings
Jack, Laura C.	(777)	TITimmin
oackson, Dorothy R.	(777)	Managarta Out
oackson, inomas E.	(TT)	TITimmimor
oucob, Hollora E.	(C+ T) ·	TITim min and
Jacobson, David	(TT)	Timmina
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orialingson, bigiun A.	(11)	Cimali Man
offistorie, william J.	(TT)	Titimmina
Jordany J.	( \// )	Winnings
othes, Dorothy IVI.	(W)	Winning
Jones, Edward A.	(W)	Winning
Jones, Franklin W.	(TT)	Ct Willipeg
Lapian, Darney	(TT)	TTT* .
Kasianchuk, Steve H. Kasloff, Zeck	-(U)	Winnipeg
Kasloff, Zeck	_(St. P U)	Transcona, Man.
Keeleyside Wargaret I	(U)	Winnipeg
Keeleyside, Margaret I.	_(U)	Winnipeg
, itayiiidi	(St DII)	Winnings
Kelly George D	(St. P U)	Winnipeg
recity, deorge D.	(St 1)	Winnings
Training, vv. Initiali	(11)	Winanina
recitati, seali W.	(11)	Winning
recifically, Daibaid E.	( W/)	Winnings
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	(     )	Winnings
Kiivert, Fillip H.	(II)	Winning
ixingston, Joseph D.	(St D)	Winnings
Kingston, Keith	(777)	Port Stanlar Ont
rippen, sames w.	(11)	Morridala Man
ich schner, Manuel	(II)	Winningg
Muckher, A. Ralph	(II)	Winnings
Allight, Campbell A.	(II)	Winning
Royle, Sydney	(TT)	Winninger
Kraus, Peter	(II)	Winning
Kraus, Steve	(II)	Winning
Kroon, Jan W.	(II)	Winning
Kummen, Harold T.	(II)	Winning
Kushner, Maurice	(II)	winnipeg
Lahossiere Leonold	(Ct D)	Winnipeg
Labossiere, Leopold	(St. B)	Somerset, Man.
Lacerte, Arthur	(St. B)	Ste. Anne des Chenes,
Laidlaw Sarah P	(777)	Man.
Laidlaw, Sarah B.	.(W)	Winnipeg

Name	College	Address
Lane, Richard E.	(II)	Winning
Langley, Margaret	(TT)	Winnipeg
Lee, Roberta	(TT)	Winning
Leighton, Robert J.	(337)	Winning
Leighton, Robert J.	(VV)	winnipeg
Leitch, William G.	(W)	winnipeg
Lejeune, Raymond R.	(St. P U)	winnipeg
Letienne, Louis	(St. B)	St. Boniface, Man.
Levadie, Ben TheoH.	(U)	Winnipeg
Leveille, Edmond K.	(W)	Winnipeg
Levinson, Ruth D.	(U)	Winnipeg
Lewis, Roy N.	(St. J U)	Winnipeg .
Lint, Walter S.	(W)	Winnipeg
Livingston, W. Rodger	(U)	Winnipeg
Loftus, William T.	_ (U)	Norwood, Man.
Logan, Marjory C.	(St. J U)	Winnipeg
Lorimer, George	(W)	Winnipeg
Lowe, Arnold S.	(W)	Harding, Man.
Lowe, Isabel M.	(W)	Winnipeg
Lowery, Robert N.	(W)	Winnipeg
Luginsky, Samuel M.	(II W)	Winnipeg
Lyon, Donald A.	(W)	Winnineg
McAuley, Ernest F.	(W)	Winnines
McBride, J. Wallace	(II)	Winnineg
McCaughey, Roy W.	(St P)	Winnines
McClung, Eleanor M.	(37.1)	Winning
McClung, Eleanor W.	(TT)	Foot Vildenen Men
McColl, Beatrice I.	(TT)	Don't Anthum Ont
McCutcheon, S. James S.	(U)	Port Armur, Ont.
McDiarmid, Athol P.	(U)	Winnipeg
McDonald, Mary I.	(AI)	Portage la Prairie, Man.
McFetridge, John D.	(W)	Winnipeg
McIntyre, Mitchell J.	(W)	Russell, Man.
McKenty, Elizabeth M.	(U)	Winnipeg
McKenzie, Wilma C.	(U)	Winnipeg
McMillan, Paul	(W)	Winnipeg
McNish, Malcolm A.	(U)	Winnipeg
McNair, Helen L.	(St. B)	Fort Garry, Man.
McNeil. Donald L.	(W)	Winnipeg
McPherson, Allan R.	(U)	Winnipeg
McPherson, W. Cameron	(St. P U)	_Winnipeg
MacDonald, John E.	(U)	Winnipeg
Macdonald, Margaret J.	(W)	Winnipeg
MacEachern, Arnold W.	(U)	Winnipeg
MacIver, Tina	(U)	Winnipeg
MacKelvie, James A.	(W)	Winnipeg
MacKenzie, Roderick	(II)	Winnipeg
MacKinnon, Arthur H.	(W)	Winnineg
MacKinnon, John R.	(AT)	Portage la Prairie Man
MacKinnon, Stuart J.	(W)	Winning
MacKinnon, Tristram J.	(TT)	Winning
Mackinnon, Iristram J.	(11)	Winning
Maclean, Ian S.	(II)	Winning
MacLean, James A.	(II)	Winning
Macleod, Ross E.	(U)	Winnipeg
Macnabb, Byron	(W U)	winnipeg
Macnabb, Thomas C.	(W U)	Winnipeg
Maksymowich, Joseph C.	(St. P U	) winnipeg

Name	College	Address
Malinski, Victor	(IJ)	Winnineg
Mallin, Joel		
Malloy, Jean	(St. B)	Lac du Bonnet, Man.
Malyszka, Willie	(U)	Winnipeg
Marantz, Phyllis I.	(U W)	Winnipeg
Marcus Allan	(U)	Winnipeg
Marrin, Veronica M.	(U)	Winnipeg
Marshall, John H.	(St. J U	St. James. Man.
Martin, Freda M.	(W)	Winnipeg
Martin, Gerald A. B.	(IJ)	Winnipeg
Martinuk, Peter R.	(St. PU)	Transcona, Man.
Matthews, George R.	(St. J)	Estevan, Sask.
Maxfield, Frederick B.	(U)	Dominion City, Man.
Mazur, Walter	(St. PU)	Winnipeg
Maynard, Marian C.	(U)	Winnipeg
Meadow, Kenneth H.	(W)	Winnipeg
Meis, Anne M.	(U)	Winnipeg
Meis, Frances H.	(U)	Winnipeg
Meloff, Jack S.	(U)	Winnipeg
Messel, Michael J.	(W U)	Rivers. Man.
Mickoski, Walter	(U)	Winnipeg
Miles, Samuel M.	(U)	Winnipeg
Miller, John J.	(W U)	Winnipeg
Millington, John H. T.	(U)	Winnipeg
Mindell, William	(U)	Winnipeg
Mindess, Harry	(U W)	Winnipeg
Minhinnick, William H.	(U)	Winnipeg
Mitchell, Jack	(U)	Winnipeg
Moncrieff, Frank C.	(St. J U	Winnipeg
Moody, Robert G.		
Mooney, John M.	(St. P)	Winnipeg
More, George G.	(U)	Transcona, Man.
Morgan, Robert T.	(U)	Winnipeg
Morley, Clarence D. Morrison, Elizabeth F.	(U)	Winnipeg
Morrison, Elizabeth F.	(W)	Winnipeg
Mortimer, Patricia L.		
Moscovitch, Norman B.		
Moss, Judith S.	(U)	Winnipeg
Mulock, John S.	(U)	Winnipeg
Musgrove, James E.		
Naiditch, Leon W.	(U)	Winnipeg
Naylor, John H.		
Neil, A. Vernon		
Nelson, Norval D.		
Neville, Beatrice I.		
Newcombe, Charles R.		
Neyron, GabrielNicolson, Madeline H.	(St. B)	St. Boniface, Man.
Olshansky, Herbert S.		
O'Neill, Jack C.		
Orloff, Harold D.		
Ormond, Horace W.		
Paget, C. Edith Parfitt, Basil	(II)	Winning
Parker, Allin		
I direct, illilii	( V V )	. Vitai, Maii.

Name	College	Address
Parker, Arthur E.	(II)	Winnineg
Parsons, Gertrude I.	(W)	Winnipeg
Partridge, Ruth	(W)	Winnipeg
Passalis, James	(St. PII)	Winnipeg
Paterson, John R.	(U)	Winnipeg
Petursson, Olafur B.	(U)	Winnipeg
Phillips, Mary E.	(W)	Winnipeg
Phomin, Barney L.	(U)	Winnipeg
Pickard, Herbert M.	(U)	Winnipeg
Polishuk, Louis	(U)	Winnipeg
Pollock, Norman	(U)	Winnipeg
Popiel, Edward L.	(St. P U)	Winnipeg
Popowich, Peter T.	(St. P U)	Transcona
Portnuff, Joe C.	(U)	Winnipeg
Pound, Marcus W.	(W)	Winnipeg
Prasow, Jack	(U)	Winnipeg
Pratt, Ross D.	(W)	Winnipeg
Prior, Thomas M.	(AI)	Portage la Prairie, Man.
Pritchard, Geoffrey R.	(U)	Winnipeg
Pritchard, Roberta A.	(W)	Winnipeg
Punshon, John M.	(U)	Winnipeg
Purdy, Charlotte L.	(U)	Island Falls, Sask.
Rance, Kathleen	(U)	Winnipeg
Randolph, Kenneth L.	(W)	Winnipeg
Rankin, Robert	(U)	Winnipeg
Rapoport, Szapsa	(St. J)	Winnipeg
Ray, Kathryn J.	(U)	Winnipeg
Reid, Ethel D.	(St. J)	Winnipeg
Richardson, Bruce A.	(U)	Winnipeg
Richardson, Kathleen E.	(W)	Winnipeg
Riddell, Frances M.		
Riddle, Venus B.	(U)	Brancepeth, Sask.
Riley, Donald A.	(W)	Winnipeg
Roberts, John M.	(W)	Winnipeg
Robertson, Elizabeth C.	(U)	Winnipeg
Robinson, Leighton W.	(W)	Winnipeg
Rodrique, Victor	(St. B)	Norwood, Man.
Rosenstock, Barney	(U)	Winnipeg
Ross, Audrey	(U)	Winnipeg
Ross, Harold A.		
Ross, Helen B.		
Ross, Norman H.	(St. J U	Winnipeg
Rowland, Leslie O.	(TT)	Winnipeg
Rusen, Charles	(U)	winnipeg
Rutherford, Robert M.	(W U)	Winning
Saddington, Robert R.	(TAT)	Winning
Sails, Robert F. Sangster, William	(VV)	Winnipeg
Sangster, William	(TT)	Winning
Sarner, Wilfred B.	(TT)	Winning
Sawula, Stephen	(U)	Winning
Schafer, David	(TT)	Winnipeg
Schiewe, Sigismund	(TT)	Winnined
Schleihauf, John W.	(11 117)	Winning
Schwartz, Tillie Scott, Marjorie L.	(TX7)	Winnined
Scott, Marjorie L.	( VV )	w mmpcg

Name	College	Address
Sedziak, Zigmunt F.	(II)	Winnipeg
Sellers, George H.		
Semmens, Hellen J.	(W)	Winnipeg
Senicie, Mike	(U)	Ladywood, Man.
Shann, Harry P.	(St. J U)	Winnipeg
Shapera, Clifford G.	(U)	Winnipeg
Shears, Frances H.	(W)	Winnipeg
Shepherd, Harold G.	(St. J)	Winnipeg
Sheppard, Harry C.	(U)	Winnipeg
Sheps, Jack G.	(U)	Winnipeg
Shoults, Milton A.	(U)	Winnipeg
Shunk, Walter D.	(U)	Gilbert Plains, Man.
Silver, Wilfred	(II)	Winnineg
Silverman, Pearl	(II)	Winnineg
Simmons, Dorothy F.	(St. J II)	Winnipeg
Simovitch, Max	(U)	Winnipeg
Simpson, R. Barrett	(U)	Winnipeg
Sinclair, Helen C.	(W)	Winnipeg
Sinclair, Lloyd	(U)	Winnipeg
Skelton, Margaret E.	(W)	Winnipeg
Smallacombe, Wilber R.	(St. J U)	Salvador, Sask.
Smerechanski, Mark	(U)	Malonton, Man.
Smith, Gordon F.	(U)	Winnipeg
Smith, John C.		
Smith, Kenneth A.	(St. J U)	Winnipeg
Smith, Marjory J.	(U)	Selkirk, Man.
Smith, Norah J.	(St. J)	Winnipeg
Smith, Roberta H.	(W)	Winnipeg
Solley, Stephen Solomon, Earl	(U)	Winnipeg
Solomon, Earl	(U)	Winnipeg
Stanley, Fred J. M.	(U)	Winnipeg
Steedman, Iona	(St. J U)	Winnipeg
Stephansson, Norman S.	(St. P U)	The Pas, Man.
Stevens, Maurice	(St. J)	Winnipeg
Stillman, Sam	(U)	Winnipeg
Stimpson, Helen M.	(W)	Winnipeg
Stockdill, Charles D.	(U)	Winnipeg
Stoffman, Isaac W.		
Stone, Edwin J.	(St. J U)	Winnipeg
Stratton, Roy F.	(St. P U)	Winnipeg
Strokon, Walter	(U)	Winnipeg
Stubbs, Stanley St. G.	(U)	Norwood, Man.
Sullivan, Maurine R.	(St. B)	Winnipeg
Sutherland, Marjorie L.	(W)	E. Kildonan, Man.
Sutton, Joan M. B.	(St. B)	Winnipeg
Sweatman, T. Fraser	(W)	Winnipeg
Swindell, Gerald S. Syme, M. Nancy W.	(U)	Winnipeg
Tolbot Edouard D	(W)	Winnipeg
Talbot, Edouard R.	(W U)	Winnipeg
Tanner, Marjorie B.	(W)	Winnipeg
Taylor, Ariana W.	(U)	Winnipeg
Taylor, Bowman S.	(U)	Winnipeg
Taylor, Dorothy S.	(U)	Winnipeg
Taylor, Duncan H.	(St. P U)	Fort Garry, Man.
Taylor, William I.	(W U)	winnipeg

Name	College Address
Teakles, John M.	(II) Winnipeg
Temple, Albert J.	(St. J. II) Winnipeg
Teney, Douglas H.	(II) Winnipeg
Teskey, Arthur G.	(II) Winnipeg
Tessler, Barry	(II) Winning
Thompson, Leonard A.	(W II) West Kildonan Man
Thurston, George S.	(W) Winning
Tomlinson, Lorne A.	(W II) Winnineg
Tooley, James F.	(St J) Winnines
Toomer, Walter K.	(St I II) Winning
Toporowski, Johanna	(W) Pine River Man
Tryon, Philip	(II) Winning
Tyndale, Lorne V.	(W) Winning
Ullyot, Donald E.	(W II) Winning
van Engel Conned E	(W U) Winnipeg
van Engel, Conrad E.	(Ct T II) Winnipeg
Varley, Phyllis	(St. J U) winnipeg
Vince, Irving L.	(St. PU) winnipeg
Vrooman, Agnes J.	(W)Winnipeg
Vrooman, Edward N.	(W)Winnipeg
Walkden, Charles M.	(U)Norwood, Man.
Walker, Marjorie W.	(W)Winnipeg
Wall, Maurice B.	(U)Winnipeg
Wallace, Robert C.	
Walley, Jack E.	(W) Birtle, Man.
Wardrop, Agnes I.	
Wardrop, Dorothea M.	(U) Winnipeg
Watson, Florence M.	
Wawrykow, Daniel G.	
Weber, Wilda A.	(AI) Portage la Prairie, Man.
Weekes, Frances E.	
Wheatcroft, John W.	
White, William B.	(U) Winnipeg
Whitehead, Robert G. D.	
Whiting, Mary P.	
Whitley, Mary C.	
Wiley, Douglas C.	
Williams, Vivian M.	
Williamson, Robert D.	(II) Winning
Wilson, H. D. Bruce	
Wilson, Ian L.	(St. J U) winnipeg
Wilson, James E.	winnipeg
Wilson, Robert M.	(U)Winnipeg
Wolinsky, Sam	
Wood, Edna	(W) Manitou, Man.
Woodsworth, Bruce	
Wortman, Charles N.	
Wren, Kenneth J.	
Wyatt, John P.	(W)Winnipeg
Yaffe, Leo	(U)Winnipeg
Yates, Dorothy B.	(W)Winnipeg
Yost, Nicholas L.	(St. P) Winnipeg
Young, Donald M.	(W)Winnipeg
Young, Mary H.	(W)Winnipeg

## JUNIOR DIVISION IN ARTS AND SCIENCE

### Second Year

Name	College	Address
Aitken, Norris G.	(XM)	Roblin, Man.
Alexander, Walter	(U)	Winnipeg
Allan, Mamie E.	(XM)	Riding Mountain, Man.
Allen, Charles C.	(IJ)	Winnipeg
Allen, Patricia M.	(W II)	Winnipeg
Allison, Wilfred S.	(II)	Baldur Man
Anderson, John O.	(St T)	Stonewall Man
Andrich, George W.	(St DII)	Portage la Prairie Man
Argue, Edgar C.	(W)	Winnings
Argue, Edgar C.	(TT)	Winning
Axford, Elmer D.	(Ct D)	Ct Toon Won
Ayotte, Gilles	(St. D)	J. Jean, Man.
Bailey, M. Edna	(W)	winnipeg
Balls, Frederic N.	(U)	winnipeg
Banning, Florence E.	(U)	Winnipeg
Barker, Lionel C.	(XM)	Gimli, Man.
Batty William F	(XIVI)	Lang, Sask.
Bayter Phyllis G	(W)	St. James, Man.
Bazin, Clement	(St. B)	Haywood, Man.
Beauchamp Laura	(St. B)	Winnipeg
Bell. Jeanette S.	(U)	Winnipeg
Belton, George S.	(XM)	Gilbert Plains, Man.
Bennett, Ralph E.	(U)	Winnipeg
Bennett, William J.	(11)	Winnipeg
Benson, Joseph M.	(W)	Winnipeg
Benum, Frank W.	(II)	St Boniface Man
Berezynski, Walter Y.	(II)	Winning
Bergman, Eric H.	(11)	Winnines
Best, James M.	(3X7 TT)	Winning
Best, James W.	(TT)	Winning
Bialuski, Rudolph L.	(C+ T)	Dinches Creek Alte
Bishop, Charles P.	(11)	Winning
Bjornson, Margaret A.	(Ct T)	winnipeg
Blair, Doris B.	(DL. J)	winnipeg
Blair, Patricia	(U W)	Kenora, Ont.
Bohonos, Walter	(U)	Winnipeg
Bonniman, Irene R.	(W)	Reston, Man.
Bonnycastle, Geoffrey F.	(U)	Dauphin, Man.
Bookhalter, Benjamin S.	(XM)	Carberry, Man.
Booth, Sybil L.	(St. J)	Winnipeg
Boroditsky, Samuel I.	(U)	Winnipeg
Boughton, Donald O.	(U)	Winnipeg
Bowman, Helen M.	(W)	Dauphin, Man.
Boyd, Allan V.	(U W)	Winnipeg
Bracken, Douglas	(U)	Winnipeg
Bradley, Ellen O.	(11)	Milestone, Sask.
Bradshaw, Robert O.	(II)	Winnineg
Brereton, Donald C.	(II)	Winnineg
Bricker, Ernest	(11)	Wayburn Sack
Driegg Albort W	(777)	Winning
Briggs, Albert M.	(TT)	Winning
Broderick, Edward C.	(TT)	Winning
Brookler, Harry A.	(U)	w minpeg
Brown, Arthur W.	(U)	winnipeg

Name	College	Address
Brown, Marion C.	(U)	Winnipeg
Brown, Reginald W.	(U)	Antler, Sask.
Browning, George F.	(W)	Norwood, Man.
Brunelle, Lillie	(St. B)	Winnipeg
Brunet, Paul B.	(St. B)	St. Boniface, Man.
Bruser, Michael	(U)	_Humboldt, Sask.
Buchanan, John G. Butt, T. John	(U)	Winnipeg
Butt, T. John	(U)	_Winnipeg
Byas, Wilfrid C.	(XM)	Portage la Prairie, Man.
Cadham, Roper G.	(U)	_Winnipeg
Calder, Alexander	(W)	Dominion City, Man.
Campbell, John D.	(W)	Winnipeg
Campbell, Mildred J.	(W)	Reston, Man.
Campbell, William J.	(U)	_Winnipeg
Cardinal, Celanire M.	(St. B)	Makwa, Sask.
Carlyle, Ruth E.	(U)	Winnipeg
Carmichael, John	_(St. P U)	Winnipeg
Carpenter, Frank B.	(U)	Winnipeg
Carruthers, Barbara	(U)	Winnipeg
Carstens, Rolf	(U)	_Winnipeg
Cates, Margaret E.	(W)	Reston, Man.
Cavanagh Patrick E.	(U)	Winnipeg
Cawson, Mary E.	(W)	_Selkirk, Man.
Chadwick, Rodney, M.	_(St. J)	St. Vital, Man.
Chase, R. Darwin	(XM)	Dauphin, Man.
Chechik Maurice M	(U)	Winnipeg
Chechik, Max D.	(U)	St. Vital, Man.
Chechik, Max D. Chivers, Douglas C.	(U)	Winnipeg
Chochinov, Fanny H.	(U)	wets Kildonan, Man.
Christie, Jack A.	(U)	Winnipeg
Civkin, Freda	(W)	Winnipeg
Clague Robert E	(U)	Winnipeg
Clark, M. Youla	(St. J)	Winnipeg
Clarke Catherine I.	(St. J)	Stonewall, Man.
Claydon Dorothy H.	(W)	Winnipeg
Clint, Elizabeth	(U)	Winnipeg
Coddington, Kathleen F.	(St. J)	Winnipeg
Cohen Shirley J	_(U W)	Winnipeg
Cohen Sydney I.	(U)	Winnipeg
Colcleugh Murray C	(U)	Winnipeg
Collins John S	(XIVI)	Ituna, Sask.
Colman Harry	(U)	Winnipeg
Comte, Elise	(St. B)	Notre Dame de Lourdes,
		Man.
Connell, Edith J.	(U)	Winnipeg
Connor, Margaret M.	(U)	Winnipeg
Constantino, Sylvio R.	(U)	Winnipeg
Coo, Coral C.	(U)	Winnipeg
Cooper, Alfred H.	(U)	Winnipeg
Cooper, Dorothy M.	(W U)	Winnipeg
Cooperband, Mary A.	(U)	Winnipeg
Corman, Sidney	(U)	Winnipeg
Cormie Archie M.	(U)	_Norwood, Man.
Corner, Mary C.	(St. B).	Norwood, Man.
Cosgrove, Russell C.	_(W U)	Tilston, Man.
COSSIOVE, ILUBBELL O.		

Name	College	Address
Cottier, Thomas G.	(II)	Winnineg
Cousens, Richmond J.	(St PII)	Winnineg
Cowan, James	(W)	Portage la Prairie Man
Coyle, John V.	(St DII)	Winning
Craig, Margaret R.	(W II)	Winning
Crosbie, Herbert A.	(TT)	Winning
Crosby, Beda	(TT)	Winning
Dack, John E.	(Ct T)	- Winnipeg
Dafoe Margaret C	(SL J)	Winninge
Dafoe, Margaret G.	(W U)	- Winnipeg
Dale, Austin A.	(377/5)	Emerson, Man.
Dandy, Bertha	(XIVI)	
Dark, James G.	(XIVI)	Hallboro, Man.
Davidson, Sylvia A.		
Davies, D. Virginia	(U)	Winnipeg
Davis, Robert A.	(U)	Winnipeg
Deacon, Annie H.	(St. B)	Napinka, Man.
Dean, William P.	(U)	Winnipeg
Delmage, Marion E.	(XM)	Dauphin, Man.
Dennistoun, Maxwell	(U)	Winnipeg
Diamond, David	(U)	Winnipeg
Dillabough, Marjorie L.	(W)	Norwood, Man.
Diner, Allen	(U)	Winnipeg
Dobbs, Leon	(U W)	Winnipeg
Dobson, Mary E.	(U)	Winnipeg
Dorfman, Sara	(U W)	Winnipeg
Dowler, Kenneth M.	(W)	Winnipeg
Drabik, Helene	(U)	Winnipeg
Drummond, Margaret L.	(U)	Winnipeg
Dubiskey, Eddie	(U)	Rapid City Man
Dubovsky, Sara	(II)	Winnipeg
Duckworth, Henry E.	(W II)	Winnineg
Duff, Jane B.	(II W)	Winning
Duff, Margot D.	(777)	Winning
Dugas, Jules-Marie		
Duncan, James L.	(NT)	Winning
Dyker, William L.	(TX7 TT)	Dingonth Mon
Dygort Cocolio M	(W U)	Winning
Dysart, Cecelia M.		
Earl, Marjorie A.		
East, Dorothy M.	(St. B)	Winnipeg
Easterbrook, Mary A.	(W U)	Winnipeg
Elford, Mary E. W.	(U)	Winnipeg
Elkin, Lewis A.	(W)	Winnipeg
Ellerman, Henry	(U)	Duff, Sask.
Ellingham, George E.	(W U)	Winnipeg
Elson, E. Arvilla M.	(W)	Cystal City, Man.
Embry, Ashton F.	(U)	Washington, D.C.
Emery, Margaret L.	(W)	Winnipeg
Evans, David W.	(U)	Winnipeg
Evans, James E. L.	(U)	Miniota, Man.
Eyford, Elva H.	(W U)	Winnipeg
Fasken, Gordon N.	(U W)	Minnedosa, Man.
Feinstein, Bertram	(U)	Winnipeg
Feller, John G.	(XM)	Rosenfeld, Man.
Fidler, Donald R.	(W)	Winnipeg
Finkleman, Sidney A.	(U)	Winnipeg

Name	College	Address
Folkersen, Victor R.	(AI)	Souris, Man.
Forrrest, Grace		
Forrest, Harry W.	(AI)	Souris, Man.
Forrest, Helen	(AI)	Souris, Man
Foy, Aubrey M.	(IJ)	Winnineg
Fraser, J. S. Gordon	(W II)	Kenton Man
Fryer, Vera J.	(II)	Pine Falls Man
Fryers, Alfred F.	(II)	Winnineg
Fryers, Walter R.	(II)	Winnineg
Funk, Peter H.	(II)	Winkler Man
Fyfe, James G.	(II)	Crystal City Man
Gagne, Hilaire	(St B)	St Pierre Jolys Man
Gamble, Wynifred	(II)	Norwood Man
Geddes, Luva M.	(W)	Winning
Gee, Arthur K.	(II)	Winning
Geller, Harry	(II)	Winning
Gelmon, Sydney R.	(II)	Rhain Saak
Gifford, Robert F.	(St PII)	Winning
Gilbart, Gordon W.	(W)	Winning
Girardin, Marie G.	(St B)	St Ponifoco Mon
Godfrey, Jessamine	(II W)	Winning
Golfman, Sidney	(II)	Winning
Gorsey, Esther	(II)	Winning
Cotachall Marry T	(TT)	Winning
Gotschall, Mary J.	(II 377)	Drandon Man
Goulden, Leila	(U W)	Indentil Man.
Graham, Alice M.		
Granovsky, Lily	(U W)	winnipeg
Grant, Alfred M.	(U)	Winnipeg
Grant, Dennis H.	(II)	Winning
Grant, Isabel C.	(U)	East Kildener Man
Grant, Margaret C.	(C+ DII)	Last Kildonan, Man.
Grassby, Richard N.	(Si. P U)	winnipeg
Gray, Margaret B.	(V)	winnipeg
Greenaway, Kathleen H. M.	(II)	Doblin, Man.
Greenaway, Robert E.	(II)	Winning C
Greenberg, Esther	(U)	winnipeg
Greenfield, Alan	(U)	winnipeg
Grierson, W. Joseph D.	(U)	winnipeg
Grieve, John L.	(W U)	winnipeg
Grocholski, Joseph S. W.	(U)	winnipeg
Hall, Clair W.	(U)	Winnipeg
Hall, Frank G.	(St. P)	winnipeg
Hall, Mary R.	(St. B)	winnipeg
Hallis, Libby	(U W)	Winnipeg
Hallson, Charles H.	(U)	Winnipeg
Hames, Marie E.	(W)	Glenboro, Man.
Hamilton, Mary C.	(U)	Winnipeg
Hamilton, Robert P.	(St. P)	winnipeg
Hansen, Johannes W.	(U)	Humbolat, Sask.
Hansen, Raymond N. A.	(XM)	Lac du Bonnet, Man.
Harrison, James M.	(U)	winnipeg
Hartley, Herbert	(U)	winnipeg
Hauch, Esther L.	(XM)	Winnipeg
Hay, Elizabeth M.	(W)	Virden, Man.
Hayes, Phyllis M.	(U)	winnipeg

Name	College	Address
Heaslip, Helen S.	(W U)	Winnipeg
Hechter, Sidney	(U)	Winnipeg
Heirsh, Clara A.	(U W)	Winnipeg
Henderson, Donald L.	_(U)	Winnipeg
Hendin, Molly	(U)	Winnipeg
Henry, Donald M.	(IJ)	Winnineg
Heuchert, Carl H., B.A.		
Hinks, C. Charles D.	(II W)	Winnineg
Hoad, Edward J. I.	(St.J)	Coaldale Alta
Hodgson, Dorothy	(St. B)	Winnineg
Hoffman, Allan	(II)	Winnineg
Hollies, John H.	(St.J.II)	Souris Man
Honeyman, John		
Horn, Jack C.	(II)	Winnineg
Howat, Greta B.		
Howden, George A.	(St.III)	Neenawa Man
Hreczuch, Stephen F.	(II)	Winning
Hunnisett, Frank	(W)	St James Man
Hunt, Holman K.	(11)	Winning
Hunt, Marjorie C.	(II W)	Winning
Hunter, Gordon W.	(S+ T)	Winning
Irwin, Harold M. W.	(II)	Norwood Man
Irwin, Haroid W. W.	(V)	Pronden Man
Irwin, John H. Isaac, Jacob	(II)	Arnoud Mon
Isaac, Jacob	(TT 377)	Winning
Israel, Sadie	(U W)	Winning
Iverson, Wilson M.	(37)	E Vildenen Wan
Jackson, E. Doreen	(TT)	Winnings
Jackson, William I.	(TT)	Winning
Jacob, Helen E.	(TT)	Winning
Jacobs, Ralph L	(VIV)	Drunkild Wan
Jeske, Ida M.	(XIVI)	Winning
Johns, Genevieve A.	( VV )	Dogina Carl-
Johnson, Kathleen	(117)	W Wildows Was
Johnson, Mildred J.	( VV )	W. Kildonan, Man.
Jones, Leslie E. S.	(W)	Harding, Man.
Kahanovitch, Moses E.	(U)	Willipeg
Kammrath, Hilda M.	(W)	E. Kildonan, Man.
Katz, Fred	(U)	winnipeg
Katz, Sydney	(TT TT)	winnipeg
Kellett, Winnifred M.	(U W)	winnipeg
Kelley, Velma M.	(W U)	winnipeg
Kennedy, Beth E.	(W U)	winnipeg
Kennedy, Fred J.	(XIVI)	Eden, Man.
Kenner, Ruth H.	(W)	Macdonald, Man.
Kenway, Paul	(St. P U)	Norwood, Man.
Kereluk, John	(U)	winnipeg
Kilvert, Malcolm Cory	(U W)	winnipeg
Kirkbride, John N.	(Dr. 1 O)	Biggar, Sask.
Kitchen, L. Janey	(AI)	Souris, Man.
Klassen, Anna	(XM)	E. Kildonan, Man.
Knott, Bernice E.	(W)	winnipeg
Kobrinsky, Morris	(U)	winnipeg
Kochan, Boris T.	(U)	winnipeg
Kraft, William B.	(U)	winnipeg
Kranis, Yetta	(XIVI)	winnipeg

Name	College	Address
Krepiakevich, Peter	(XM)	Hamton Sask
Krzyzanowski, Felix A.	(St. PII)	Arden Man
Kuntz, Eugenie	(U W)	Winnipeg
Kurys, Charles L.	(St. P)	Winnineg
Lafleur, Edward R.	(St. B)	Le Bret Sask
Laidlaw. Kenneth A.	(W)	Winnines
Laird, Caroline	(W)	Winnineg
Lamb, Arthur N.	(II)	Winnineg
Landler, Bessie M.	(11)	Winnineg
Lardner, Lea A. G.	(II)	Winning
Lawson, Margaret A.	(W)	Winnineg
Laycock, Margaret L.		
Leahy, Edna		
Leckie, Gordon W.	(W)	Winnings
Lecker, Manuel N.		
Lehmann, Elsa		
Leitch, Eunice M.	(W)	Winning
Leitch, John W.	(II)	Winning
Lennox, Gordon H.	(II)	Winnines
LePage, Evelyn	(W)	Winning
Lepper, Gerald H.	(II)	Dauphin Wan
Lerner, Arthur	(II)	Winning
Lertzman, Ann	(II)	Canora Soals
Letionna Dana	(C+ D)	Ct Doniford Man
Letienne, Rene		
Levi, Elsie		
Levi, Irving Z.		
Levin, Sam R.	(St DII)	Winning
Linscott, Bernard M.	(II)	Winning
Litman, Irvin	(117)	Doubhin Man
Little, Agnes G.	(S+ T TT)	Ook Toke Man
Littler, Charles E Loadman, Bruce	(II)	Winning
Loadman, Bruce	(II)	Winning
Locke, WilliamLodge, Eleanor A.	(TT 337)	Winning
Lodge, Eleanor A.	(II)	Winning
Longhurst, Grant B.	(S+ T)	Winning
Longmire, Betty F.	(II)	Prodonbury Coal-
Loptson, G. Camoens Loptson, Thorstein H.	(TT)	Brodonbury Sask.
Love, Mary L.	(TT)	Winnings, Sask.
Lowden, Henry J.	(TT 377)	Point Piron Ont
Lowe, Mary Y.	(II)	Winning
Ludman, Harry R.	(37)	Winning
McAllister, Evelyn M.	(TT)	Winning
McCormick, Anne	(C4 T TT)	winnipeg
McCracken, Joseph A.	(SL. J. U)	- Winnipeg
McCulloch, Allan W.	(AT)	Souris, Man.
McCulloch, Eleanor J.	(TI)	Courie Was
McCulloch, Robert G.	(Ct D)	Mondo Cost-
McCullough, John A.	(St. B)	v onda, Sask.
McCurdy, Evelyn	(W)	winnipeg
McDiarmid, John S., Jr.		
McDonald, Marion C.	(W)	winnipeg
McFetridge, James	(U)	winnipeg
McFetridge, William R.	(U)	winnipeg
McGavin, Donald C.	(W)	Carman, Man.

Name	College	Address
McGhee, Bella J.	(W U)	Hamiota, Man
McGillivray, Edward H.	(U)	Winnipeg
McGillivray, Dorothy L.	(U)	Winnipeg
McGillivray, Ruth C.	(U)	Winnipeg
McHaffie, John P.	(W II)	Swan River Man
McHattie, Elizabeth A.	(II)	Winnines
McInnis, John W.	(W)	Winnineg
McIntyre, Donald G.	(II)	Daunhin Man
McIntyre, Donald N. C.	(II)	Winnines
McKay, William A.	(W)	Inkster PO Man
McKibbin, Josephine F. C.	(II)	Winning
McKim, Florence E.	(W)	Welville Sask
McKittrick, Madeline	(St B)	Winnines
McLaughlin, Donald M.		
McLellan, Lois E.	(XM)	Inwood Man
McLeod, Jean E.	(W)	Winning
McMillan, Audrey	(11)	F Kildonan Man
McMurphy, Jack A.	(XX II)	Winnings
McNeill, George T.	(TT)	Winning
McRostie, R. Rietta	(TX7 TT)	Winning
MacCharles Ernest D	(TT)	Modicine Het Alte
MacCharles, Ernest D. Macdonald, Donald B.	(377)	Elgin Mon
MacGachen, Ethel B.	(VV)	Desire Cost
MacGachen, Ethel B.	(TT)	North Dortal Coal-
Mackenzie, Ian G.	(Ct DII)	North Portal, Sask.
MacLaren, Roy M.	(St. P U)	winnipeg
Main, William	(TT)	winnipeg
Malcolm, John M.	(TT)	winnipeg
Malkin, Solomon	(V)	winnipeg
Malloy, Frances L.	(AIVI)	Lac du Bonnet, Man.
Malott, Eleanor C.		
Margolese, Irvine B.	(U)	Winnipeg
Marion, Marie A.		
Mark, Winnifred G.	(W)	winnipeg
Marsh, Alfred J.		
Marshall, Margaret E.		
Martin, Alice L.	(W)	Brookdale, Man.
Martin, Elizabeth		
Martin, Ella G.	(XIVI)	Winnipeg
Martin, Emily J.	(W)	Belmont, Man.
Martin, Rodney D.		
Martin, Thomas H.	(U)	Winnipeg
Martinson, Dorothy M.	(W)	Winnipeg
Mason, Vere M. B.	(W U)	Winnipeg
Mathers, Helen J.	(W)	Winnipeg
Matheson, Helen L.	(W)	Cartwright, Man.
Mayne, Margaret M.	(W)	Pilot Mound, Man.
Mayne, Marjory M.	(AI)	Souris, Man.
Medd, Ernest H.	(St. J U	Winnipegosis, Man.
Merrett, Ross C.	(U)	Winnipeg
Metzak, Harry Micanovsky, Archie	(U)	Winnipeg
Micanovsky, Archie	(U)	Winnipeg
Miles, Gordon E.	(U)	Winnipeg
Millar, James P.	(U)	Winnipeg
Miller, Eldred G.	(XM)	Souris, Man.
Miller, Isobel C.	(St. J)	winnipeg

Name	College	Address
Miller, Margaret A.	(W)	Winnineg
Mitchell, Solomon	(XM)	Winkler Man
Mitenko, Michael A.	(W)	Winnineg
Mitenko, Peter	(W II)	Winnines
Molinski, Charlie	(II)	Ladywood Man
Monson, Joseph W.	(II)	Assinihoja Sask
Mooney, Wilbur C.	(II)	Winning
Moore, Alfred J.	(II)	Winning
Moore, Frank L.	(II)	Norwood Man
Moore, Kathleen	(II)	Winning
Moore, Margaret L.	(II)	Winning
Moore, William	(St I)	Winning
Moore, William H.	(TT)	Winning
Morrison, Glen D.	(37)	Winning
Morrison, Neil M.	(VV)	Normand
Morse, Constance E.	(TT)	Norwood, Man.
Moscovitch, Esther G.	(U)	-Norwood, Man.
Muir, William K.	(TT TT)	winnipeg
Munro, Lucille J.	(U W)	winnipeg
Murphy, Brian J.	(Ct DII)	Winnipeg
Murphy, Francis B.	(St. P U)	Winnipeg
Neal, William S. Neill, William G.	(U)	Winnipeg
Neill, William G.	(W)	Winnipeg
Nelson, Sadie	(U)	Winnipeg
Nemish, Ernest W.	(U)	Winnipeg
Neufeld, Jacob G.	(XM)	Altona, Man.
Nichol, John H.	(U)	Winnipeg
North, Glynn H.	(W)	Carman, Man.
Noveski, Frank	(U)	Winnipeg
Nutter, Jean A.	(U)	Winnipeg
O'Brien, Desmond C.	(W U)	Winnipeg
O'Dea, Frank M.	(U)	Winnipeg
Ogryzlo, Metro A. Olfman, Abraham	(U)	Winnipegosis, Man.
Olfman, Abraham	(U)	Kamsack, Sask.
Ollivier, Rene A.	(St. P U)	Kenville, Man.
Ostaff, Jessie	(W U)	Winnipeg
Owens, James G.	(W U)	Winnipeg
Pace, F. M. Evelyn	(U)	Winnipeg
Paget, Elaine K.	(XM)	Winnipeg
Paghis, Irvine	(U)	Winnipeg
Palovsky, Morris	(U)	Winnipeg
Paluk, William M.	(W)	Winnipeg
Panar, Malvin	(U)	Winnipeg
Paris, Ronald C.	(W U)	St. James, Man.
Park, John E.	(St. J)	Winnipeg
Parkhurst, Verna E.		
Parr Alice	(11)	Winnipeg
Parr, Alice Partridge, Claude M.	(U)	Winnipeg
Paterson, Alice E.	(W)	Winnipeg
Paul Louis	(U)	Winnipeg
Paul, LouisPeck, Catherine M	(St. J)	Transcona Man
Pendleton, Glenn H.	(II)	Winnineg
Penton, Reginald E.	(St. J)	Winnineg
Perdue, Helen A.	(AI)	Souris Man
Peterkin, Jack B.	(II)	Winnineg
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Name	College	Address
Peters, William F.	(II)	Winnineg
Petrishin, Rose		
Petursson, Olafur		
Pickersgill, Frank H. D.		
Pincock, George L.		
Pincock, Margaret H.	(W U)	Winnipeg
Pingle, Constance		
Popple, Frances B.		
Porter, Freda M.	(W U)	Winnipeg
Potter, Kenneth R. S.	(W)	Winnipeg
Premachuk, Fred T.	(U)	The Pas, Man.
Preston, George H. W.	(St. J U)	Fort Frances, Ont.
Preudhomme, Egerton R.	(St. J)	Winnipeg
Price, Mildred S. C.	(W U)	Winnipeg
Purcell, Eileen	(St. B)	Winnipeg
Quong, Ton L.	(U W)	Minitonas, Man.
Radley, Gladys M.	(W U)	_Crandall, Man.
Ragland, Virginia K.	(U)	Norwood, Man.
Ransby, Edward R.	(W)	Winnipeg
Reade, Ruth M.	(W)	Winnipeg
Redburd, Norman B.		
Redmond, Helen R.	(St. B)	Winnipeg
Render, Malcolm E.	(XM)	Hartney, Man.
Richards, Irene L.	(U)	Norwood, Man.
Riehl, Lilly	(U)	Winnipeg
Rivoire, Alice E. H.	(St. J)	Winnipeg
Robbie, John E.	(U)	Winnipeg
Robertson, Allan E.	(U)	Winnipeg
Robertson, Donald P.	(U)	Winnipeg
Robertson, Kenneth	(W)	Winnipeg
Rodgers, Robert A.	(XIVI)	Winnipeg
Roe, John W. F.	(W)	Winnipeg
Romanovsky, Joseph M.		
Rosenblat, Eddie	(U)	Winnipeg
Rowe, Gabriel R.		
Royal, Joseph K.	(U)	Winnipeg
Russell, William J.	(U)	Sloux Lookout, Ont.
Rutherford, Owen	(U)	Winnipeg
Rutherford, Richard L.	(U)	winnipeg
Saltzman, Harry L.	(TX7)	Winning
Saunders, Thomas	(W)	winnipeg
Schilt, Clarence H.		
Scott, William R. Scoville, Frances E.		
Serken, Mildred		
Setter, Martha B.		
Shack, Freda S.		
Shafer, Dorothy B.		
		Minn.
Sharpe, Lloyd		
Shelford, Reginald H.	(U)	Winnipeg
Shelmerdine, Walter	(XM)	Winnipeg
Shepard, Helen C.		
Shieff, Lillian J.		
Shoup, Constance M.	(W)	Norway House, Man.

Name	College	Address
Showler, Jack	(II)	Winnineg
Shurvel, Fannie S.	(II W)	Winnineg
Silberberg, Dave L.	(II)	Winnineg
Silversides, John L.	(II)	Winning
Simkin, Jennie	(II)	Winning
Simpson, Ada I.	(St I)	Winnengosia Mon
Simpson, Ruth M.	(W II)	Winning
Sinclair, Eileen M.	(TAT)	Winning
Sirulnikoff, Harry M.	(TT)	Winning
Skelly, Claire R.	(S+ D)	Winning
Smith, Alexander M.	(37)	St Willipeg
Smith, Donald N.	(TT 3X7)	St. Vital, Man.
Smith, D. Seyward	(TT)	winnipeg
Smith Edwin E	(377 77)	winnipeg
Smith, Edwin E.	(W U)	Reston, Man.
Smith, Eleanor V.	(W U)	Winnipeg
Smith, Gerald L.	(U)	Theodore, Sask.
Smith, Grace	(U)	Winnipeg
Smith, Howard E.	(St. J)	Winnipeg
Smith, Janet H.	(St. J)	Winnipeg
Smith, Joyce B.	(W)	Winnipeg
Smith, Oswald A.	(U)	Winnipeg
Smith, Sidney R.	(U)	Winnipeg
Smith, Sidney T.	(U)	Winnipeg
Sochaski, Adolphe Solomon, Allan O.	(XM)	Gimli, Man.
Solomon, Allan O.	(U)	Dauphin, Man.
Spears, William R.	(U)	Winnipeg
Spence, Bert H.		
Spence, Ernest J. H.	(U)	Winnipeg
Spencer, Clifford A.		
Spratt, Helen F.		
Stangl, Herbert J.	(St. PU)	Portage la Prairie Man
Steele, Gordon M.	(W)	Winnineg
Steinberg, Abram	(U W)	Winnineg
Stephens, Mary F.	(U)	Winnineg
Stephenson, Archibald H.	(W)	Weyhurn Sask
Stevens, Frederick W.	(W)	Winnines
Stevenson, Howard W.		
Stevenson, Josephine I.	(II)	Winnings Wall.
Stewart, David B.	(St J II)	Ninette Man
Storey, Norah P. E.	(W II)	Winning
Storr, Phyllis A.	(W)	Winning
Stott, Francis P.		Brandon Man
Stronach, Jack R.	(II)	Winning
Caralan Taha II	(TT)	Winning
Sunley, John H.	(TT)	Winning
Suttie, Eleanor J.	(TT)	winnipeg
Swan, John A. C.	(117 77)	winnipeg
Sweeney, FrancesSweeting, Dennis D.	(W U)	winnipeg
Sweeting, Dennis D.	(U)	Winnipeg
Sword, John H.	(W)	Winnipeg
Tass, Jack	(U)	Winnipeg
Taylor, Cyril E.	(U)	Winnipeg
Taylor, James M.	(W)	Winnipeg
Teskey, George H.	(U)	Killarney, Man.
Thompson, Dorothy M.	(W)	Morris, Man.
Thompson, Lloyd M.	(U)	Winnipeg

Name	College	Address
Thomson, W. Kenneth	(U)	Winnipeg
Tingley, Bruce B.	(XM)	Selkirk Man
Tompkins, Frances N.	(St. B)	Blairmore, Alta
Toporeck, Anda	(U)	Winnipeg
Towson, Ernest J.	(XM)	Winnipeg
Trimmer, Betty E.	(U W)	Winnipeg
Trott, Harry G.	(U)	Winnineg
Truman, Eleanor R.	(W U)	Winnipeg
Turner, James A.	(U)	Norwood Man
Turner, Margaret L.	(St. B)	Winnipeg
Turner, W. Ronald D.	(U W)	Winnipeg
Udin, Doreen	(U)	Winnipeg
Vernon, Lillian Ruth	(W U)	Starbuck, Man
Vilensky, Irwin I.	(U)	Winnineg
Voth, John L.	(U)	Winkler Man
Waddell, John R.	(U)	Newdale Man
Wainwright, William A.	(W)	Hargrave Man
Walley, Kathleen M.	(W)	Birtle Man
Ward, Leslie	(IJ)	Winnineg
Wark, William T.	(11)	Moosomin Sask
Warren, Margaret E.	(II)	Winning
Warwick, John A.	(IJ)	Winnineg
Watson, Hugh D.	(W)	Winnineg
Watson, Ruth	(W)	Winnineg
Wawrykow, John G.	(XM)	Gimli Man
Weekes, Millicent E.	(W)	Winning
Weekes, William J.	(W)	Winnineg
Wegenast, Lillian M.	(W)	E Kildonan Man
Wells, Jean C.	(St. J)	Winnineg
Wellwood, Aileen	(W)	Winnineg
Wheelans, June B.	(St. J)	Winning
White, Desmond C.	(II)	Winnineg
White, Jean	(XM)	Makaroff Man
White, Norris E.	(W)	Roland Man
White, T. Emerson J.	(XM)	Dauphin Man
Wiley, J. Harvie	(U W)	Winnineg
Willis, Isabel K.	(St. J)	Winnineg
Wilson, Charles G., Jr.	(St. J)	Winnineg
Wither, George M. A.	(II)	Winnineg
Wood, Robert	(U)	Winnineg
Wood, William A.	(XM)	Brandon Man
Woods, Verna L.	(AT)	Souris Man
Wright, Maurice W.	(W U)	Winnineg
Wright, Shirley I.	(U W)	Winnineg
Wylie, Miriam F.	(U)	Estevan Sask
Yelland, Horace G.	(U St. J)	Winnineg
Yonker, Zenon	(U)	Winnipeg
Young, Robert L.	(U)	Humboldt, Sask.
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# SENIOR DIVISION IN ARTS AND SCIENCE

#### First Year

Name	College	Address
Adams, Ethel P.		Winnings
Adams, Margaret B.	(TT)	Winning
Adelman, Ben		
Alexander, Robert B.	(II)	Winning
Anderson, Frederick J.		
Anderson, Stephen P.		
Andrews William D	(II)	Winning
Andrews, William T. Armstrong, Francis W.	(VIV)	Walita Man
Armstrong, John H.	(XIVI)	Norwood Man
Arnett, Una F.	(II)	Winning
Ashley, Laura V.	(377)	Winning
Backstein, Max	(TT)	Winning
Backstein, Max	(317)	Dina Falla Man
Bartlett, Margaret H.	(W)	Fine Falls, Man.
Bartley, Melvin W.	(AT)	Port Frances, Ont.
Bartz, Bernard S.	(AI)	Regina, Sask.
Beattie, M. Margaret	(U)	Winnipeg
Bechard, Louis L.		
Beckstead, James O.	(XIVI)	Crystal City, Man.
Beirnes, Victor G.	(W U)	Birtle, Man.
Belapolsky, Sam	(St. J)	Winnipeg
Bell, Gilbert M.	(U)	Winnipeg
Bennett, Norah	(U)	Winnipeg
Bereskin, Louis	(St. J)	Winnipeg
Bergman, Norman S.	(U)	Winnipeg
Bews, David R.	(W)	Winnipeg
Birchard, Ruth	(U)	Winnipeg
Bishop, Gordon H.	(AI)	Regina, Sask.
Bletcher, Margaret	(W U)	Winnipeg
Bletcher, Mary	(W U)	Winnipeg
Bliss, Dorothy M.	(St. B)	Winnipeg
Boughton, Elizabeth R.	(W)	Arden, Man.
Boyd, Daisy	(U)	Winnipeg
Braun, Linda R.		
Breen, Richard R.	(U)	Winnipeg
Brickman, Leo	(U)	Winnipeg
Brophy Sheila M.	(St. B)	Winnipeg
Provin Pohort A	(W II)	Winnipeg
Bruder, Ernest E.	(St. J)	Winnipeg
Dandon Contrado A	(St. J)	Winnipeg
Drunot Francois	(St. B)	Norwood, Man.
Pryan Samuel S	(XM)	Ethelbert, Man.
Bryant James S.	(U)	Banп, Alta.
Buchanan John A	(W)	Winnipeg
Burmaster, Bervl Y.	(W)	Winnipeg
Burnett Wilfred G	(W)	Winnipeg
Butcher Wilfred F	(IJ)	Winnipeg
Company Tomos H	(XM)	Grandview, Man.
Carbotte Marcel	(St. B)	Fry's, Sask.
a la Dath O	(\\\/)	Winnineg
Conton Torrac M	(W)	Winnipeg
Chauviere, Guy	(St. P)	Norwood, Man.

Name	College	Address
Chudleigh, Harold E.	(II)	Winnineg
Church, Evelyn P.	_(W)	Lena Man
Clark, Elizabeth A.	(St. B)	Winnineg
Clark, Hart D.	(II)	Winnineg
Cochran, Marjorie H.	(W)	Rouleau Sack
Cohen, Jack H.	(II W)	Winnings
Coleman, Charles C.	(W)	Pilot Mound Man
Conklin, Jack G.	(II)	Winning
Cottingham, Esther C.	(II)	Winning
Coyle, Margaret F.	(St B)	Winning
Crain, Mary	(XM)	Fortion Man
Creba, Wilma E.	(777)	Winning
Creighton, Eileen B.	(C+ D)	- winnipeg
Croll Dione D	_(St. B)	Cypress River, Man.
Croll, Diane D.	(U)	Yorkton, Sask.
Cummings, Errol W.	(W U)	Winnipeg
Cunningham, Aubrey B.	(W)	Souris, Man.
Davidson, William C.	(U)	Calgary, Alta.
Davison, Helen A.	_ (U)	Oxbow, Sask.
Delmage, John E.	(XM)	Dauphin, Man.
Dembinsky, Vera D.	_ (W)	The Pas, Man.
Dickson, Frances B. W.	_(U)	Winnipeg
Dirks, Peter	(XM)	Plum Coulee, Man.
Dobbie, G. Alice R.	(XM)	Winnipeg
Dorman, Marjorie F.	_(U)	Winnipeg
Duboff, Sally	_(U)	Winnipeg
Duncan, Chester	_(W)	Winnipeg
Ellingham, John B.	_(U)	Fort Garry, Man.
Emery, Donald M.	_(U)	Winnipeg
Esling, Ainslie G.	_(W)	Winnineg
Eustace, Julius L.	-(W U)	Winnipeg
Farenhurst, Thomas A.	(USt. P)	Bowsman River Man
Feesey, Agnes L.	_(XM)	St. James Man
Ferns, Harry S.	(II)	Winning
Findlay, Elizabeth L.	(II)	Medina NV
Ford, Alexander E.	(XM)	E Kildonan Man
Foster, Cecil C.	(II)	Lena Man
Foulis, Frances M.	(W)	Dryden Ont
French, Eleanor	(II)	Winning
Friedman, Harry	(II)	Winning
Gabel, Elizabeth H.	(777)	Windon Man
Gainer, Verna A.	(C+ D)	Moranda Cada
Gauthier, Louis	(St. B)	Marengo, Sask.
Gendron, Louis E.	(St. B)	St. Boniface, Man.
Gilchrist, William N.	- (XIVI)	Pointe du Bois, Man.
Giroux, Ellen L.	- (XIVI)	Sinciair, Man.
Goodspeed, Fred M. C.	(St. B)	Winnipeg
Grober Welter P	-(U)	Winnipeg
Graham, Walter R.	-(XM)	Winnipeg
Grandy, Doris I.	(W)	Winnipeg
Green, Audrey H.	(U W)	Winnipeg
Greer, Marguerite L.	- (W)	Winnipeg
Gresham, William J.	_(XM)	Winnipeg
Hales, Raymond E.	(U W)	_Winnipeg
Harder, Linda R.	_(XM)	Plum Coulee, Man.
Harper, Henry S. B.	(St.J)	Winnineg
Hawkins, Edward W.	(W)	Dauphin, Man.

Name	College	Address
Hay, Evelyn M.	(W)	Winnipeg
Hearn, A. R. Gordon	(W)	Winnipeg
Heinzelmann, Helen V.	(U)	Winnipeg
Henderson, Gwendolyn M.	(W U)	Winnipeg
Henderson, Stanley C.		
Herzer, Dorothy A.	(U)	Winnipeg
Hibbert, Ellen A.	(XM)	Boissevain, Man.
Hill, Herbert	(U)	Winnipeg
Hillier, Verna M.	(U)	Winnipeg
Hollenberg, Rosetta	(U)	Fort William, Ont.
Holmes, John L.	(U)	Winnipeg
Holmes, Robert N. R.	(St. J)	Winnipeg
Hrynkow-Henry, Michael J.	(U)	Janow. Man.
Hudson, Betty	(St. J)	Winnipeg
Hudson, Betty Humeniuk, Peter J.	(U)	Winnipeg
Humphries, Ernest C.	(U)	Winnipeg
Humphrys, M. G. Jane	(U)	Winnipeg
Hyman, Ernest R.	(U)	Winnipeg
Jsbister, Claude M.	(U)	Winnipeg
Jackson, Stanley R.	(U)	Winnipeg
Johnston, Nellie P.	(U)	Winnipeg
Johnston, William A.	(U)	Winnipeg
Jonsson, Maria S.	(W)	Winnipeg
Jopko, Nicholas	(U)	Virden, Man.
Jutras, Rene	(St. B)	Letellier, Man.
Kasian, Nicholas	(U)	Transcona, Man.
Kay, Dorothy I.		
Keeler, M. Yvonne	(W)	Winnipeg
Kennedy, Hazel	(St. J)	Winnipeg
Kenway, Sheila M.	(St. B)	Norwood, Man.
Kirkpatrick, John M.	(St. J)	Winnipeg
Kliffer Farl	(U)	Winnipeg
Knine IIna M.	(W)	Winnipeg
Kosubal John	(XM)	Aberdeen, Sask.
Kotyk Nicholas	(XM)	Ethelbert, Man.
Langton Harold G	(U)	Winnipeg
Leishman, Edna C.	(W)	Winnipeg
Lemon, Edward A. F.	(W U)	Winnipeg
Liddle Thomas C.	(W)	Winnipeg
Linford Jack H.	(U W)	Winnipeg
Little, Mary E.	(W)	Winnipeg
Lockhart William S.	(XM)	Brandon, Man.
Lovelock, Margaret K.	(St. B)	Winnipeg
Lowery, E. Ruth	(W)	Winnipeg
Lohr Anna	(St. B)	Winnipeg
Tuelsi Emil	(U)	Winnipeg
Luginsky, Molly R. Lutack, Paul M.	(U W)	Winnipeg
Lutack, Paul M.	(W)	Winnipeg
McAllister Homer R.	(W U)	Winnipeg
McAllister Jean	(W)	Winnipeg
McAlnine Alovsius D.	(AI)	Carmangay, Alta.
McArthur, Pauline E.	(W)	Dauphin, Man.
McColl. Ellen L.	(U)	Winnipeg
McGibbon Clayton W.	(W)	Winnipeg
McKim, Margaret G.	(W)	Melville, Sask.

Name	00,,,0	Address
McKim, Margaret T.	(St. B)	Winnipeg
McKinney, George W. F.	(St. J)	St. Vital, Man.
McLean, Jean L.	(W U)	Winnipeg
McLeod, Muriel A.	(W)	Winnipeg
McMurray, Jane I.	(XM)	Winnipeg
MacDonald, Donald I.	(U)	Winnipeg
MacKenzie, May F.	(XM)	Moose Jaw. Sask.
MacLean, Ross M.	(W IJ)	Winnipeg
Macpherson, Jean T.	(U)	Winnipeg
Macrovic, Frank R.	(U)	Winnineg
MacTaggart, Marion C.	(U)	Winnipeg
MacTavish, John D.	(St J)	Winnineg
Malcolmson, Isobel	(W)	Carman Man
Malcom, Irma M.	(St I)	Winnineg
Manning, Herbert C.	(St P)	Winnines
Marsden, Iris V.	(W II)	Winning
Marshall, Edith M.	(St B)	Winning
Marshall, George M.	(37)	Winning
Marshall, George W.	(TX7)	Churchill Man
Martin, Margaret C.	(TT)	Winning
Master, James M.	(TT)	Store Mountain Man
Meighen, Arthur T.	(U)	Boots as la Project Man.
Metcalfe, W. Lloyd	(Ct T)	Portage la Prairie, Man.
Middleton, Charles N.	(St. J)	Lethbridge, Alta.
Miller, Nancy M.	(W)	Winnipeg
Mitchell, H. Jean	(U)	Winnipeg
Mitchell, Ruth R.	(XM)	Winnipeg
Mitchell, William O.	(U)	Weyburn, Sask.
Molison, Maisie L.	(U)	Winnipeg
Moody, Alan C.	(U)	Routledge, Man.
Moore, Herman W.	(U)	Winnipeg
Moore, Richard K.	(U)	Winnipeg
Morgan, John H.	(U)	Winnipeg
Morrison, Helen B.	(W)	Winnipeg
Morrison, William F.	(U St. J)	Winnipeg
Movse, Loretta	(W)	Winnipeg
Munroe Harriett E.	(U)	Winnipeg
O'Donnell, Margaret	(St. B)	Winnipeg
O'Keefe John M	(U)	Winnipeg
Olesczuk Leon R	(XM)	Narol, Man.
Oleson, Tryggyi J.	(W)	Glenboro, Man.
Oroskovits, Eugene L.	(St. P)	Riverton, Man.
Palmer, Frank L.	(U W)	MacGregor, Man.
Patterson, Margaret M.	(St. B)	Winnipeg
Pearen, Raymond O.	(U)	Keewatin, Ont.
Percy, Hugh R.	(St. J)	Regina, Sask.
Perkins, Marjorie I.	(U)	Estevan, Sask.
Perley, Alfred A.	(U)	Winnipeg
Perry, Robert R.	(U)	
Peterman, Ursula S.	(St J)	Winnipeg
Popeski, Ben	(II)	Winnipeg
Precious, Dorothy	(II)	Winnipeg
Prest, Victor K.	(II)	Winnipeg
Prest, Victor A.	(777)	Winnipeg
Price, Sylvia M.		Winnipeg
Prosser, James B.	(11)	Winnipeg
Puls, Rudy A.	(0)	- Willinbeg

Name	College	Address
Purdie, Helen F.	(W)	Winnineg
Purdie, James A.	(St. J)	Winnipeg
Quelch, Christopher S.	(XM)	Matlock, Man
Ramaekers, Georges	(St. B)	St. Boniface Man
Reid, Joseph B.	(II)	Winnines
Reinoehl, Theodore	(II)	Winnines
Ritter, Peter M.	(AT)	Regina Sask
Rivoire, Jack A.	(St I)	Winning
Robertson, Helen S.	(St. I)	Winning
Robinson, John M.	(II)	Winning
Rodgers, Kathleen I.	(XM)	Winning
Romanche, Nita	(St T)	Winning
Ross, Dorothy C.	(377)	Winning
Ross, John M. G.	(747)	Winning
Poutledge C Torrige	(337)	Wasthawa Man
Routledge, C. Louise	(W)	westbourne, man.
Russell, MaryRussell, Thelma C.	(U)	winnipeg
Russell, Theima C.	(St. J)	winnipeg
Russell, William A. G.	(W U)	Cardale, Man.
Ruth, Roy H.	(XIVL)	Cypress River, Man.
Rutherford, William	(W)	St. James, Man.
Ryan, Catherine		
Sadler, Florence M.	(U)	Winnipeg
Samson, Herbert S.	(U)	Winnipeg
Sankey, Arthur W.	(U)	Waskada, Man.
Saunders, Alice E. L.	(W)	Winnipeg
Schmertzing, Wolfgang	(XM)	Winnipeg
Schofield, Marian E.	(U)	Winnipeg
Schortinghuis, Harry H.	(U)	Winnipeg
Scott, John S.	(W)	Winnipeg
Secter, Jack M.	(U)	Winnipeg
Sedziak Henry P	(U)	Winnipeg
Segal Roslyne	(U W)	Winnipeg
Sharp Mitchell W.	(U)	St. James, Man.
Shaw Margaret A.	(U)	Winnipeg
Sheps, Sam B.	(U)	Winnipeg
Shewan Cameron	(IJ)	Winnipeg
Siemens, George G.	(XM)	Morris, Man.
Silverman Bernard	(U)	Winnipeg
Sing, Charles W.	(XM)	Portage la Prairie, Man.
Slobodzian, John	(XM)	Dauphin, Man.
Slotin, Sam	(U)	Winnipeg
Smith, Margaret E.	(W)	Millet, Alta.
Smith, Norman O.	(11)	St. Vital. Man.
Sparling, Joseph W.	(W II)	Winnipeg
Steinkopf, Helen	(II W)	Winnipeg
Stephenson, Signy H.	(W)	Winnineg
Stevenson, Florence E.	(II)	Winnineg
Stout, Josephine E.	(TT)	Winnineg
Stout, Josephine E. Sutherland, Annice M.	(St I)	Winnineg
Swaine, Emmie C.	(St. J)	Winnines
Sweine, Emmie C. Sweeney, Florence C.	(777)	Winning
Sweeney, Florence C. Swyers, Burton G.	(777)	Carberry Man
Swyers, Burton G.	(TT)	Winning
Tarr, Alan E.	(777)	Kenton Man
Termuende, H. Edmee	(AT)	Meschem Sack
Theberg, Delphis R.	(A1)	ivicaciiaiii, bask.

Name	College	Address
Thomas, J. Henri	(St. P)	Weyburn Sask
Thompson, John E.	(U)	Winnipeg
Thorvaldson, T. Myrtle	(W)	Riverton, Man.
Trueman, Gordon E.	(U)	Winnipeg
Vazza, Virginia V.	(St. J)	Winnipeg
Wachal, Frank A.	(XM)	Narol, Man.
Wainwright, Bertha	(W)	Hargrave, Man.
Walker, Walter H. W.	(XM)	Selkirk, Man.
Wallace, Graham B.	(W U)	Goodlands, Man.
Wallace, Marjorie M.	(XM)	Emerson, Man.
Walker, Gladys M.	(W)	Winnipeg
Watson, Marjorie A.	(W)	Winnipeg
Wawrykow, Alexander	(U)	Camp Morton, Man.
Webber, Thomas H.	(U)	Miami, Man.
Weightman, George E.	(U)	Winnipeg
Wells, Augustine L.		
Whitbread, Lily G.		
Wilde, Norman W.	(U)	Winnipeg
Wiley, Leslie W.		
Williams, Arthur G. S.	(XM U)	Winnipeg
Wilson, Marjorie R.	(St. J)	Winnipeg
Winkler, Anthony V.	(U)	Virden, Man.
Winram, William M.		
Wood, Cecil E.		
Wyatt, Victor H. L.		
Wylie, Florence J. S.	(W)	St. James, Man.
Wyman, Russell A.	(U)	Winnipeg
Young, Beatrice L.		
Young, John O.		
Younger, Elizabeth	(W)	Winnipeg

# SENIOR DIVISION IN ARTS AND SCIENCE Second Year

Name	College	Address
Ackland, Catherine M.	(U)	Winnipeg
Alpert, Morris A.		
Anderson, Sigrun	(W)	Cypress River, Man.
Arnett, Arthur S.		
Atchison, Clarence E.	(U)	Winnipeg
Atkins, R. Carl	(U)	Winnipeg
Auger, Edward L.	(St. B)	Neche, N.D.
Averbach, Sara C.		2 0
Avren, Sam S.	(U)	Winnipeg
Baird, Helen L.	(U)	Regina, Sask.
Bawlf, Robert S.	(U)	Winnipeg
Belyea, Walter P.	(U)	Winnipeg
Birt, John C.	(U)	Winnipeg
Bonnycastle, Joan	(U)	Dauphin, Man.
Bornoff, George	(St. J)	Winnipeg
Bowles, Richard S.	(U)	Winnipeg
Bowman, Allan S.	(U)	Winnipeg
Box, Gilbert D.	(U W)	Treherne, Man.

Name	College	Address
Boyd, Mary R.	(U)	Norwood, Man.
Breadner, George	(XM)	Victoria, B.C.
Briggs, Roberta	([])	Winnipeg
Broad, M. E. Eileen	(W)	Winnipeg
Brown, Arthur F.	-(II)	Winnipeg
Browse, Robert M.	(11)	Winninegosis Man
Buchanan, William W.	(W)	Winnineg
Buggey, Lillian R.	(W)	Rivers Man
Bulman, Lilian C.	(II)	Winnines
Burns, Margaret M.	(II)	Winnines
Campbell, Marjorie A.	(TT)	Norwood Man
Cheyne, Kathleen E.	(C+ T)	Winnings
Christie, Mabel V.	(II)	Winning
Clarke, Constance A.	(TT)	Winning
Clarke, Ralph B.	(TT)	Winnedge Wan
Coleman Morley H	(TT)	Dilot Mound Man
Coleman, Morley H Conklin, John M	(337)	Winning Wall.
Conox Mourice T	(Ct D)	Winning
Cooney, Maurice J.	(St. P)	winnipeg
Corbett, W. Alwyn		
Cottingham, Adrienne	(U)	winnipeg
Coupar, Margaret L.	(W)	Winnipeg
Coutts, Winston F.	(U)	Winnipeg
Craig, Marjorie		
Curle, Eldred	(U)	Winnipeg
Curtis, Edward H.	(U)	Winnipeg
Dahlgren, Dwight J. A.	(XM)	Miniota, Man.
Daley, Margaret A.	(St. B)	Winnipeg
Davidson, James I.	(U)	Winnipeg
Davidson, Muriel M.	(W)	Winnipeg
De Ruyck, Gerard		
Diehl, A. Cecil		
Doerksen, William B.	(U)	Winnipeg
Doupe, Clare	(U W)	Winnipeg
Dunsheath, Ward	(W)	Winnipeg
Dyker, Allan L.	(W)	Binscarth, Man.
Elliott, Marjorie C.	(W)	Winnipeg
Elliott, Robert W. K.	(W)	Winnipeg
Elvin, Ruth B. M.	(U W)	Winnipeg
Erb, Walter J.	(U)	Winnipeg
Ferguson, Blair		
Finnigan, Norman O.	(XM)	Ste. Anne, Man.
Forrest, Jessie E.		
Forster, Ora M.		
Fox, Gordon K.	(U)	Winnipeg
Fraser, Constance	(W)	Winnipeg
Fraser, Dorothy P.		
Fraser, Jean A.	(W)	Pilot Mound, Man.
Fuller, Gertrude M.	(St.J)	Winnineg
Galliot, Andree-Alix		
Callot, Illiance Illia	(50. 1)	Lourdes, Man.
Gass, Muriel J.	(II)	
Gerry, Cleve C.	(W II)	Fort William Ont
Gibbons, Joyce	(II)	Daunhin Man
Gilespie, Isabel E.		
Gillespie, Kathleen M.		
Ginespie, Kauneen W.	( VV )	willipeg

Name	College	Address
Ginsberg, Hymie D.	(St. J)	Winnipeg
Giroux, Ellen L.	(St. B)	Winnipeg
Goldstein, Heloise	(W)	Winnipeg
Gordon, Marjorie	(U)	Winnipeg
Graham, Lyla M.	(W)	Fort Frances Ont
Gray, Jean Una	(II)	Winning
Greenaway, Archibald G.	(W)	Roblin Man
Gregory, Evelyn D.	(II W)	Winning
Haigh, W. Arthur	(W)	Souris Man
Hamilton, Evelyn	(II W)	Winning
Handel, Doreen B.	(W/)	Headingly Man
Haney, William L.	(II)	Winnings, Man.
Harbottle, John L.	(II)	Ding Folla Man
Hamis A Van	(TT)	Winning
Harris, A. Van	(II)	Folor DO Man
Havelock, Charles W.	(TT)	Troley P.O., Man.
Hawryluk, John M.	(TT)	winnipeg
Hecht, Anne R.	(U)	Winnipeg
Hendin, Jetta S.	(U)	Winnipeg
Hodgson, Lorine J. G.	(St. B)	W. Kildonan, Man.
Holmes, Orville E.		
Hoole, C. Rene	(W)	Winnipeg
Horne, Helen C.	(U)	Winnipeg
Howlett, Edna J.	(W)	Winnipeg
Hughes, Jack S.	(U)	Winnipeg
Hunter, Jean C.	(W)	Reston, Man.
Irwin, Genevieve D.	(U)	Winnipeg
Jack, Colin E.	(U)	Winnipeg
Jackman, Margaret E.	(U)	Middlechurch, Man.
Jacques, Adrien A.	(St. B)	St. Boniface, Man.
Johnson, John		
Johnson, Ragna		
Jordan, William A.		
Joubert, Joseph		
Jurzyniec, Felix	(St. P)	Montmartre, Sask.
Kiernan, Matthew K.	(AI)	Southey, Sask.
Kilgour, David E.	(U)	Winnipeg
Kohn, Samuel		
Kornelsen, Jacob G.		
Korny, Walter, B.Sc.		
Krett, Alexandra		
Kyle, Vivian M.		
Landreth, Wallace J.		
Lane, Gwendolyn J.	(W)	Rirtle Man
Lang, William S. M.	(TT)	Winning
La Riviere, Eugene A. C.	(C+ D)	St Ponifoco Man
Leckie, George C.		
Levi, Leonard	(TT)	Winning
Levi, Leonard	(TIT)	Winnipeg
Levin, Bonnie		
Libert, Robert J.		
Liddle, John W.		
Loban, Ada		
Loree, Maurice R.		
Lovell, Irene		
Ludwig, Jessie H.	(W)	Winnipeg
Lush, E. Nadine	(W)	Winnipeg

Name	College	Address
Lutes, Earl L.	(II)	Winnipeg
McClellan, Grace I.	(W)	Selkirk, Man.
McClure, Mary N.	(II)	Winnipeg
McConnell, Mabel A.	(W)	Brandon, Man.
McDonald, Mary E.	(St B)	Winnineg
McDonald, Mary E.  McDougall, Roberta E.  McElroy, Marguerite L.	(W)	Winnineg
McElroy Marguerite I.	(W)	Winnipeg
McElroy, Marguerite L. McInerney, Veronica	(II)	Winnipeg
McKellar, Earl D.	(XM)	McCreary Man.
McKenty, John S.	(II)	Winnipeg
McLean, Elsie E.	(W)	Tilston Man
McMillan, Isobel C.	(II)	Arnaud, Man.
McMurphy, Jack A.	(II W)	Winnineg
Mackay, Katherine E.	(W)	Winnineg
MacKay, Mary J.	(II)	Winnineg
MacKenzie, Lillian G.	(W)	Winnipeg
MacLennan, David A.	(XM)	Montreal PQ
MacPhail, Eleanor A.	(II)	Winnineg
Magill, Helen M.	(U)	Winnineg
Maley, Stephen C.	(II)	Windsor Ont
Martin, Mary I.	(II)	Weyhurn Sask
Martin, Mary I.  Martin, Millicent B.	(XM)	Winning
Matthews, Michael V.	(AT)	Grassdale Sask
Medovy, Ida V.	(W)	Winning
Miller, Alice	(777)	Winnineg
Mitchell, Charles H.	(II)	Winning
Moffat, Harold P.	(XM)	Lakeland Man
Moffett, Helen B.	(W)	Balcarres, Sask.
Morrison, Alice E.	(W)	Fort Frances Ont
Morrison, Helen E.	(W).	Miami Man
Morton, Helen D.	(W)	Elphinstone Man
Morton, Margaret	(St J)	Gladstone Man
Murphy, Annie M.	(W)	Imperial Sask
Murray, Hayward G. S.	(TT)	Winnines
Nixon, Margaret H.	(TT)	Winnineg
Noble, Alexander	(TT)	Winning
Normandeau, Gerard	(St B)	La Broquerie Man
Norris, Marjorie C.	(II)	Winnineg
O'Brien, Edgar	(St P)	Winnineg
Offen, Constance A.	(W)	Rivers Man
Onions, William G.	(W II)	Winnineg
Owong Marion I M	(W)	Winnineg
Owens, Marion J. M. Panar, Maisie	(W)	Winnipeg
Pastuck, Russell	(II)	Winnineg
Perry, Vaughan H.	(W)	Hartney Man
Peters, Gerhard H.	(XM)	Gretna Man
Phillips, Netanis A.	(II)	Winnineg
Pildrem, Margaret E.	(XM)	Winnineg
Pipe, Horace M.	(II)	Manitou, Man.
Poole, Alice E.	(W)	Neenawa Man
Punter, Gerald B.	(W)	Winnipeg
Quinlan, John J.	(11)	Winnipeg
Rennie, Lillian M.	(IJ)	Portage la Prairie, Man
Rex, Edna M.	(W)	Holland, Man.
Reynolds, Joseph B.	(AI)	Denzil, Sask.
Ticytotus, oosepii D		

Name	College	Address
Ripstein, Zelma	(W)	Winnipeg
Robinson, James B.		
Rosenthal, Sadye J.		
Ross, Evelyn F.	(W)	Winnipeg
Ross, John F.		
Schaefer, Paul J.		
Segal, Jack		
Shanks, Mary A.	(W)	Winnipeg
Shannon, Mabel	(St. B)	Winnipeg
Shaw, J. Leslie D.	(U)	Winnipeg
Shaw, William M. W.	(W)	Elm Creek, Man.
Simmons, Norman W.	(U)	Winnipeg
Sinclair, Kathleen M. Sirluck, Glad	(U W)	Winnipeg
Sirluck, Glad	(U)	Winkler, Man.
Smith, Albert E.	(St. J)	Shoal Lake, Man.
Spence, Marjorie B.	(U)	Winnipeg
Stark, Philip J.	(W)	Dauphin, Man.
Steindel, Ben	(XM)	Winnipeg
Stephen, John D.	(XM)	E. Kildonan, Man.
Stephens, Lillian B.	(W)	Wawanesa, Man.
Tarr, Elizabeth H.		
Templeton, Helen A. M.	(W)	Winnipeg
Thompson, M. A. Irene	(U)	Winnipeg
Thompson, Winnifred E.		
Thomson, Mary E.	(U)	Winnipeg
Tisdale, Paul K.	(U)	Winnipeg
Tod, Phyllis E.	(U)	Winnipeg
Truman, Mason P.	(U)	Winnipeg
Tryon, Victor W., Jr.	(U)	Winnipeg
Tuck, Helen H.	(U)	Winnipeg
Vaisrub, Daria	(St. J)	Winnipeg
Vanular, Henry	(XM)	Winnipeg
Vogel, Ruth M.	(U)	Winnipeg
Walker, Florence J.	(W)	Winnipeg
Ward, Winnifred M.		
Warkentin, Peter W.	(XM)	La Riviere, Man.
Wells, Ruth A.	(St. J)	Winnipeg
Whitteker, Clarice J. W.		
Wilder, Miriam L.		
Williams, Mabel G.		
Wright, Thelma M.	(U)	winnipeg

# SENIOR DIVISION IN ARTS AND SCIENCE Second Year—Honors

Name	*	College	Address	
Black, George M Blackett, Dougla				
Clarke, Frances	J., B.A.	 _(U)	Winnipeg	
Clay, Charles				
Cramer, Archie			Moose Jaw, Sask.	
Fanshaw, Huber				

Name	College	Address	
Frazer, William G.	(U)	Winnipeg	
Hansen, Stefan	(U)	Humboldt,	Sask.
Jones, Frank W. O.	(U)	Winnipeg	
Katz, Sidney	(U)	Winnipeg	
King, John E.	(U)	Winnipeg	
King, Brockwell C.			
Lanham, Percy A. S.	(U)	Winnipeg	
Lee, Margaret H.	(U)	Winnipeg	
McIntosh, Russell T.	(U)	Winnipeg	
MacLeod, Florence G.	(U)	Winnipeg	
Mitchell, Phyllis C.	(U)	Winnipeg	
Neufeld, Abram H.	(U)	Winnipeg	
Pope, Edward W.			
Remis, Leonard			
Sprung, George M. C.			
Stewart-Hay, Ronald K.	(U)	Winnipeg	

## SENIOR DIVISION IN ARTS AND SCIENCE

#### Third Year-Honors

Name	College	Address
Bailey, Robert C.	(U)	Winnipeg
Bragg, Leslie G.		Wapella, Sask.
Brock, Stanley E.	(U)	Winnipeg
Easterbrook, William T. J.	(U)	Winnipeg
Finegood, Max	(U)	Hazlet, Sask.
Gracey, Gertrude P.		
Johannson, Harold G. P.	(U)	Winnipeg
Johnson, Herman	(U)	Winnipeg
Jones, William D.		
Lavender, Richard E.		
Loughead, G. Yuill B.		
McBride, W. Leonard		
McKillican, Mary E.		
McLuhan, Herbert M.		
Malcolmson, G. Morton		
Moscovitch, Nathan A.		
Pierce, Glen W.		
Popeski, Ben	(U)	Winnipeg
Pratt, Philip C.		
Secord, Campbell H.		
Slutsky, Nathan A.		
White Ruth M.	(U)	Winnipeg

# SPECIAL STUDENTS IN ARTS AND SCIENCE

### First Year-Junior Division

Name	College	Address
Abbott, J. W	(U)	Winnipeg
Beachell, Ernest C.	(U)	Winnipeg
Burns, Leo	(U)	Winnipeg

Name	nedlet.	College	Address
Burns, Leonard J		(U)	Winnipeg
Freedman, Max			Winnipeg
Guidinger, Ambrose E.			
Hughes, John E.			
Johnston, Wm. J.		(U)	Dominion City, Man.
McIvor, Edgar J.			
Marrin, Frederick A.			
Nyman, Ernest G. E.		(U)	Winnipeg
Pankiw, John W.		(U)	Winnipeg
Parsons, John		(U)	Winnipeg
Prygrocki, Walter		(U)	Winnipeg
Robson, Robert C.		(U)	Fort Garry, Man.
Scott, W. Patrick		(U)	Winnipeg
Solinski, Joseph J.			
Spohr, Waldemar E			
Sweeney, John A.		(U)	Winnipeg
Williamson, Robert O.			

## Second Year-Junior Division

Name	College	Address
Bull, Mary M	(U)	Winnipeg
Strogas, Peter	_(U)	Winnipeg

### First Year-Senior Division

Name	College	Address
Braddell, Eberhard S. P., B.Sc.	(E.E.)_(XM)	Winnipeg
Leveille, J. Gerard, B.A.	(U)	Winnipeg
Moody, Ruth L.	(St. B)	Winnipeg
Whyard, James H.	(U)	Winnipeg
Willson, Eulalie H.	(U)	Winnipeg

## Second Year-Senior Division, Pass

Name	College	Address
Caine, Gordon P. Daigneau, Lillie G., M.A. Puls, Otto	(U)(U)	Winnipeg Winnipeg Winnipeg

## Third Year-Senior Division, Honors

Name	College	Address
Johnson, Thorarinn V., B.A. Mezon, Esther A., B.A.		Minnewakan, Man. Winnipeg
Proudfoot, Gerald MRintoul, John W		Winnipeg Moose Jaw. Sask.

#### STUDENTS TAKING PRELIMINARY M.A. COURSES

Name	Address
Abercrombie, Carson E., B.A.	Winnipeg
Belton, Alice M., B.A.	Winnipeg
Cassidy, Mary C., B.A.	Winnipeg
Cates, K. I. Phyllis, B.A.	Reston, Man.
Conrod, Stuart F., B.A. (Sask.)	Winnipeg
Dolmage, Ewart R., B.A.	Winnipeg
Fletcher, Dougal L., B.S.A.	Argyle, Man.
Gishler, Melba E., B.A.	Winnipeg
Hemphill, Ieleane L., B.A.	Winnipeg
Keith, Clarence I., B.A.	Winnipeg
King, Bernice C., B.A.	
Kruglikoff, Alex, B.A.	Winnipeg
McInnes, Lillian M., B.A.	E. Kildonan, Man.
McMurchy, Archibald C., B.A.	Winnipeg
Martin, Arthur W. T., B.A.	Winnipeg
Mills, Evelyn V., B.A.	Winnipeg
Orde, Jean, B.A.	
Patrick, Arthur W., B.A.	Winnipeg
Ross, William G., B.A.	
Sinclair, Georgina S., B.A.	Winnipeg
Slater, Daniel M., B.A.	Winnipeg
Stinson, Lloyd C., B.A.	
Taylor, Harold O., B.S.A.	Winnipeg
Thomas, John B., B.A.	Winnipeg
Turnbull, Wilfred E., B.A.	Fillmore, Sask.

## STUDENTS TAKING PRELIMINARY M.Sc. COURSES

Name	Address
Brisbin, George W. F., B.Sc.	Pilot Mound, Man.
Caldwell, Orval G., B.S.A.	Ninga, Man.
Chataway, Charles R., B.Sc.	Winnipeg
Collins, Carl W., B.Sc.	Winnipeg
Cook, Edward J. R., B.Sc.	Grandview, Man.
Denike, Emerson H., B.Sc.	Winnipeg
Downes, Kenneth W., B.Sc.	Fort Garry, Man.
Duncan, William W., B.Sc.	Winnipeg
Herzer, Richard W., B.Sc.	Winnipeg
Jamieson, Morley C., B.S.A. (Toronto)	Winnipeg
Josie, Gordon H., B.Sc.	Winnipeg
Koffman, Albert A., B.Sc.	Winnipeg
Lane. Harry C., B.Sc.	Winnipeg
McCracken, William H. R., B.Sc.	Winnipeg
Marchant, Edwin H. J., B.Sc.	Winnipeg
Neufeld, Cornelius C., B.Sc.	Morden, Man.
Newton, Beatrice J., B.Sc.	Winnipeg
Oretzki Morley J. B.Sc.	Winnipeg
Rowland, William S., B.S.A.	Winnipeg
Sair Louis	Oxbow, Sask.
Samis, Clarence S., B.Sc.	Arcola, Sask.
Siemens, Gerard J., B.Sc.	Altona, Man.
Thomson Wallace A., B.S.A. (Sask.)	Winnipeg
Timonin, Michael, B.S.A.	Winnipeg
Warkentin, Cornelius C., B.A., B.Sc.	Winnipeg

#### MASTER OF ARTS

MASILIK OF AN	.15
Name	Address
Allison G. Carlyle, B.A.	
Belapolsky, Alex, B.Sc.	Winnipeg
Caners, Leonard A., B.A.	
Clark, John N., B.A.	
Cox, Alexander, B.A.	Sioux Lookout, Ont.
Cryderman, Maurice W., B.A.	Gladstone, Man.
Gillis, Sigfus V., B.A.	Brown P.O., Man.
Harris, Florence A., B.A.	Winnipeg
Hemphill, Ieleane L., B.A.	Winnipeg
Hoole, Arthur H., B.A.	
Ison, Francis J., B.A.	
Kahanovitch, Goldie L., B.A.	Winnipeg
Knowles, Stanley H., B.A. (McMaster)	Los Angeles, Calif.
Lockhart, John W., B.A.	Winnipeg
McNeill, D. James E., B.A.	Clairmont, Alta.
Manishen, Max, B.A.	Winnipeg
Martin, Arthur W. T., B.A.	Winnipeg
Mills, Evelyn V., B.A.	
Murray, Margaret, B.A.	Winnipeg
Norris, Ivor A., B.A.	Russell, Man.
Richards, Cyril F., (B.Sc., Linfield; B.D.,	
Rochester Theological Seminary)	Brandon, Man.
Ridd, Dwight N., B.A.	
Ridd, John E., B.A.	Winnipeg
Robb, D. Stewart M., B.A.	
Roberts, Hugh A., B.A.	Winnipeg
Smaller, John J. H., B.A.	Winnipeg
Spice, Mary, B.A.	Yorkton, Sask.
Tallin, Clive K., B.A.	Winnipeg
Thexton, Annie C., B.A.	
Thierry, Maximilien W., B.A.	
Turnbull, Winnifred H., B.A.	Winnipeg

#### MASTER OF SCIENCE

Name	Address
Ayre, Charles A., B.Sc.	Winnipeg
Bradley, Gertrude L., B.Sc.	Winnipeg
Brown, Edith M., B.Sc.	Winnipeg
Brett, Edgar W., B.S.A.	Winnipeg
Campbell, Earle M., B.Sc.	Winnipeg
Cohen, Harvey, B.Sc.	Winnipeg
Collins, Carl W., B.Sc.	Winnipeg
Dawson, Arthur S., B.Sc.	Winnipeg
de Jong, Sybren H., B.Sc. (C.E.)	Fort Garry, Man.
Denike, Emerson H., B.Sc.	Winnipeg
Gruber, Willie, B.Sc. (C.E.)	Winnipeg
Hoogstraten, Jack, B.Sc. (C.E.)	Winnipeg
Johnston, Stewart A., B.Sc.	Winnipeg
Koffman, Albert A., B.Sc.	Winnipeg

Name	Address	
McGregor, James A., B.S.A.	Winnineg	
McLeod, James A., B.Sc.		
Mar, Andrew, B.Sc. (E.E. and C.E.)		
Moyse, Adele V., B.Sc.		
Richman, H. Isadore, B.Arch.	Winnipeg	
Roberts, Jessie S., B.A. (Tor.)		
Rogerson, Edward W., B.Arch.		
Ross, Donald K., B.Sc.	Winnipeg	
Sheets, William E., B.Arch.	Verigin, Sask.	
Slotin, Louis, B.Sc.	Winnipeg	
Solomon, Ernest, B.Sc.	Dauphin, Man.	
Spivack, Joe, B.Sc.		
Swyers, Lawrence A., B.Sc.		
Tildesley, William T., B.S.A.		
Wallace, S. Ethelyn, B.Arch.		
Watson, Grant G., B.Sc.		
Whiteman, Robert, B.S.A.	Winnipeg	
DOCTOR OF PHILOSOPHY		

Name				Address
Carter, H. Dyson (Man.)	n, B.Sc.	(Man.),	M.Sc.,	Winnipeg
Gunn, C. Kennet	th, B.Sc.	(Man.)	M.Sc.	Winnipeg

#### PHARMACY First Year

Name	Address
Anderson, Joseph L. S. Brickman, Everard A.	Dauphin, Man.
Brickman, Myer Cowtun, Anthony R.	Dauphin, Man.
Gimpel, Sidney Goldin, Isadore P. Gorrie, William J. M.	Winnipeg
Hershfield, Sam Laslett, Geoffrey G	Winnipeg Shoal Lake, Man.
McLeod, Allan M.  Munroe, Leslie F.	E. Kildonan, Man.
Oliver, Charles T. Padolsky, Louis Posner, Maurice	Winnipeg
Saper, Lillian Schwartz, Joseph	Winnipeg Winnipeg
Singer, Harry Smith, William J. Stevens, Ernest G. G.	Winnipeg
Dievella, Elliest G. G.	Oak Lake, Man.

Name	Address
Stinson, Garnet M.	Stonewall, Man.
Sucharoff, William M.	Winnipeg `
Waldhorn, Allay	Winnipeg
Weiner, Samuel I.	Winnipeg
Whitcomb, William P.	Winnipeg
Wiseman, Irwin H.	Winnipeg

#### PHARMACY Second Year

Name .	Address
Bezkorowyny, Michel	Howden, Man.
Eades, Fred W.	
Garnett, Harold R.	7 7.
Hawksworth, Eric	Winnipeg
Keenberg, Louis	
Kronson, Philip	Winnipeg
McGill, Robert M.	
Migicovsky, Baral	Winnipeg
37 : 1/1 T311:- A	Warranges Man
Negrych, Alexander	Winnipeg
Pearlman, Sidney J.	Winnipeg
Rafferty, Harold J.	Winnipeg
Reid, David H.	
Shenkarow, Louis E.	Winnipeg
Shields, George T.	Waskada, Man.
Stokes, Alfred J.	Oak Lake, Man.
Tedford, Douglas A.	Winnipeg
Zeal, Charles	Winnipeg

#### EXTENSION COURSES IN COMMERCIAL SUBJECTS

(The address in each case is Winnipeg unless otherwise indicated)

Abbott, J. W.

Allan, John W.

Armstrong, Frank C.

Arnold, John P.

Bangart, John A.

Batty, George W.

Beal, Frederic W. R.

Belair, J. Denis

Bishop, Leonard R.

Botterell, John A.

Boyd, R. V.

Brooks, Alfred E.

Budge, Stanley J.

Cocks, Douglas C.

Clubb, James E.

Cooke, Ben

Dakin, Arthur R.

Davidson, James

Devlin, James A.

Dewar, William

Dott, Robert M. M.

Duthie, Bruce

Eaket, James A.

Fenton, Edward C.

Ferguson, Matthew

Forstall, A. Y., St. Boniface, Man.

Fraser, Drummond

Fraser, Muriel B.

Gary, Albert

Gray, Lilly N.

Green, Frank L.

Halstead, Barnard

Hamlin, John E.

Harte, Edwin C., B.S.

Head, William L.

Heinicke, George E.

Horne, Gordon M.

Hudson, Walter R.

Johnston, Oliver H. M.

Keeley, James F.

Kernahan, J. E.

King, Robert J.

Ketter, John

Kuryk, George G.

Lapraik, Thomas, St. James, Man.

Lay, Robert H.

McIntosh, Frank W.

McKague, Lorne A.

McKague, Robert E.

McKay, M. E.

McLarnon, William

McLean, James

Macdonald, Alex D., St. Vital, Man.

MacLeod, Norman T.

Macmillan, John S., Norwood, Man

Macmillan, Gwendolen, Norwood,

Man.

Miller, David, E. Kildonan, Man.

Morgan, R. Edwin

Morrison, Isobel S.

Morrison, Jack

Muir, John F. M., B.Sc. (C.E.)

Oddson, Florence

Peebles, Dora, St. Vital, Man.

Phillips, Donald M.

Pope, John J.

Read, Charles A.

Robertson, Harry C., Norwood, Man.

Rogers, James H.

Ruse, William H.

Sadler, Doris L. E. A.

Sagratt, Alexander H.

Sammons, B. A.

Shaw, George F.

Smith, Mark W.

Snukal, Alex

Steele, James V., E. Kildonan, Man.

Stewner, Victor W.

Tingle, Janet

Trueman, James C.

van Diggelen, A. H.

Walton, Frances S.

White, Andrew G., W. Kildonan,

Man.

Wilson, Douglas J.

Womersley, Frank E.

Wood, Thomas P.

#### EXTENSION COURSES IN GEOLOGY

Anderson, Einar Astle, S. W. Balsillie, A. J. Baldock, J. W. Barrie, William Barrett, H. S. Baxter, George

Beddome, George, B.Sc. (C.E.)

Bell, William

Bellingham, Sidney

Bennett, H.O. Bidinost, Romeo Birsnelk, John Bowman, A. S. Bridges, E. C.

Brown, D. F. G. Brownrigg, F. L. Bunn, V. W. Burgoyne, J. H.

Burgoyne, R. S. Burnside, R. A. Campbell, Neil

Carstens, Rolf Code, Milton

Connolly, Josephine

Connony, Josephine
Corrigan, B. L.
Corrigan, Elsie A.
Coupal, Camil
Crabb, J. K.
Crispin, Oddy
Cumming, W. J.

Cyr, Armand Dart, R. W.

Deacon, R. D.
Derbyshire, Henry
Derbyshire, R. W.

Dodokin, N. R. Doe, Alfred

Ellis, S. B. English, E. S. Eyford, Glenn

Farley, R. C. Favez, Marcel Finch, Jack Foster, C. R.
Freeman, R. W.
Ganier, Victor
Gillies George

Finlay, Harold

Fisher, C. L.

Gillies, George Goodmanson, S.

Gordon, R. C., B.Sc.

Gracey, A. H.
Graham, Stewart
Green, N. F. H.
Grieve, T. W.
Griffiths, Arthur
Hague, J. P.
Hargrave, C. H.
Harris, P. B.
Harwich, E.
Hemenway, H. L.

Hemenway, H. I Henry, R. C. Herbert, James Hough, J. E. Hunt, W. H.

Ibbotson, W., B.Sc. Johannesson, K. Jones, S. T.

Kerns, Alex. Kerns, Betty Koser, L. W. Lawrie, L. Lemon, W. A. Le Neveu, J. C.

Lightbody, W. A. Lilley, W. J. Loewen, Irvin Loutit, J. A. Lyons, M. A.

MacIntyre, Florence E.

Maclean, H. A.
Macphail, Helen
Maffey, C. H. G.
McClellan, A. C.
McCurdy, J. A.
McDonald, H. S.
McEachern, John

McGregor, M. J. McPhillips, G. A. McVicar, J. A. Maskell, Edith Meindl, J. A. Mills, J. T. Moffatt, A. B. Moore, H. L. Muir, Harry Murdoch, W. Murphy, Patrick Newman, E. M. Nicolson, A. B. Orr, G. W. Pearce, H. C. Petursson, A. Phillips, A. G. Phillips, A. T. Phunney, L. H., LL.B. Phinney, Vanda Procter, L. Raemer, James Rasmussen, A. J. Redmond, J. G. Reed, F. B. Reid, David Reilly, H. C. Richardson, J. B. Richardson, W. H. Roberts, Ellis Ross, J. R. Ross, W. Le B. Russell, Edward Sawatzky, G.

Scott, T. L. Shanks, J. O. Shanks, M. L. Sharman, Frances B., B.A. Sidor, Michael Simpson, K. H. Skidmore, H. H. Skidmore, N. T. Slater, W. S. Smerechanski, M. Smith, N. F. Smith, R. M. Stephenson, George Stoker, George Street, J. J., B.A.Sc. Street, L. J. Stubbington, Jack Swail, Stanley Sym, C. D. Templeman, H. G. B. Tinland, W. G. Verner, F. M. Waddell, James Ward, Etta Ward, Frederick Wathen, Mern Weekes, W. Williams, G. H. Williams, Victoria Williams, W. K. Willson, Gray Wilson, J. V. Wyllys, D. D.

# SUMMARY OF REGISTRATION

May 1st, 1932-April 30th, 1933

Way Ist, 1332—April 3		· JA J. a	Mevlen
Sharmon, Process B. D.A.	Men	Women	Total
Junior Division in Arts and Science		.A. 7	
First Year	409	144	553
Second Year	363	232	595
CONTROL IL C. OF BE ASSESSED TO BE		-	
	772	376	1148
Senior Pass Division in Arts and Science			
First Year	174	133	307
Second Year	107	119	226
2001			110 1770
	281	252	533
C . II D			
Senior Honors Division in Arts and Science		.231	99
Second Year	18 22	5	23 26
Third Year	22	4	20
	40	9	49
	.01	1.1 . 11 . 1 V	insuit.
Preliminary M.A. Courses	15	10	25
Master of Arts	23	8	31
Preliminary M.Sc. Courses	24	, 1	25
Master of Science	26	5	31
Doctor of Philosophy	2		2
		24	114
Total Arts and Science (less	90	24	114
duplicates)	1179	659	1838
dupitodos)	1110	, 000	1000
Pharmacy (Diploma Course)			
First Year	24	1	25
Second Year	18		18
		att bit of	4 4 4 4 4 4 4
Control of the Contro	42	1	43
Medicine			
First Year	58	5	63
Second Year	47	6	53
Third Year	52	5	57
Fourth Year	66	4	70
Fifth Year	32	6	38
Bachelor of Science in Medicine	2		2
	055		
	257	26	283
Law			
First Year	17	2	19
Second Year	4	4	4
Third Year	21	1	22
Fourth Year	21	1	22
			-/-
	63	4	67

	Men	Women	Total
Engineering	0.5		05
First Year	85		85 93
Second Year			40
Third Year (Civil)	40		42
Third Year (Electrical)	25		25
Fourth Year (Civil)Fourth Year (Electrical)	39		39
Fourth Year (Electrical)			
	324		324
Architecture		ale when	1.1
First Year	9	5	14
Second Year	8	1	9
Third Year	13		6
Fourth Year	6	A STOREST MAN	
	36	6	42
Agriculture (Diploma Course)			
First Year	13		13
Second Year	6		6
Third Year	7		7
			26
1 : 1: (D - C)	26		20
Agriculture (Degree Course) First Year	26		26
Second Year	21	1	22
Third Year	12	desimilations	12
Fourth Year	18		18
Tour on Tour			
	77	1	78
Home Economics (Diploma Course)			
First Year		17	17
Second Year		11	11
		28	28
Home Economics (Degree Course)		63	63
First Year		55	55
Third Year		36	36
Fourth Year		33	33
Fourth Tear			
		187	187
Total	2004	912	2916
Duplicates	2	2	4
Net Total, Regular Courses	2002	910	2912
Manitoba Summer School, 1932	455	532	987
Extension Courses—			
Commercial Subjects	76	9	85
Short Course in Geology	147	10	157
Short Courses in Agriculture	51	8	59
Total	2731	1469	4200
Duplicates (chiefly Summer			
School and regular session)	167	112	279
ATTEN OR ATTENDED	2564	1957	3921
NET GRAND TOTAL	2564	1357	3921
	-		

### UNIVERSITY OF MANITOBA ALUMNI ASSOCIATION

This Association is a voluntary organization of graduates of the University of Manitoba, whose aim is to give practical expression to the desire of all graduates to help the University interpret its function to the community at large and to maintain in its graduates a spirit of loyalty to, and interest in, their University.

The Association arranges a number of meetings and social affairs for University graduates. Through its Directorate the Association also pays close attention to many important matters affecting the University.

The Quarterly, which is the official publication of the Association, is published regularly. Through its medium news of interest to University graduates is forwarded to members. The Quarterly encourages a spirit of unity amongst a scattered graduate body.

The annual membership fee of the Association is \$2.00. This fee includes a year's subscription to the Quarterly.

#### OFFICERS, 1933-1934

Honorary President	Isaac Pitblado, M.A., K.C., LL.D.
President	Hugh A. Roberts, B.A., LL.B.
First Vice-President	Frank R. Garland, B.A.
Second Vice-President	Miss Elsie Moore, B.A.
Third Vice-President	Harold D. Barbour, M.A., LL.B.
Treasurer	Douglas Chevrier, B.A.
Secretary	Ralph C. Ham, B.Arch.

#### CANADIAN OFFICERS' TRAINING CORPS

#### University of Manitoba Contingent

After a period of useful service in supplying trained officers and men for the C.E.F. during the Great War, the Manitoba Contingent of the C.O.T.C. was re-organized, and established on a four-company basis, during the Autumn of the 1919-20 session.

The C.O.T.C. is a unit of the non-permanent Active Militia, but forms no part of the organization for war, and cannot be called out for active service as such. Its primary object is to provide students at Universities with a standardized measure of military training with a view to their qualifying for commissions in the country's auxiliary forces, to enable them to give personal service to their country with the least possible interference with their civil careers, to ensure that Militia units have their establishments complete in the junior commissioned ranks, and to build up an adequate reserve of scientifically trained officers who have completed a period of consecutive and systematic military training, on academic lines, of a nature calculated to produce good officers.

In the Manitoba Contingent this training is carried out by officers and N.C.O.'s attached from the Permanent Force of M.D. No. 10, who work in the closest co-operation with the officers and N.C.O.'s of the unit.

To quality as "efficient" a member of the Contingent must attend 40 parades if in his first year of service, and 25 if in a subsequent year, and must complete the prescribed course of musketry. He may then continue his training during the following year and present himself in March at the examination for Certificate "A" (Lieutenant's). If successful in this examination he may, after a further year's training, take the examination for Certicate "B" (Captain's). These examinations are conducted by the War Office, London, and are the same for all contingents of the O.T.C. throughout the Empire.

Members of the C.O.T.C. are supplied with a free issue of uniforms, and receive pay in proportion to the number of days devoted to training.

Apart from the military and physical training and the musketry instruction, there are special features of a social nature held under the auspices of the O.T.C. such as the annual dinner and dance.

Training is offered in two branches of the Service, the Infantry and the Medical. The contingent has been organized as an Infantry Battalion since 1919, and in 1928 the organization of a Medical Company was authorized.

Since re-organization 213 have qualified for Certificate "A" Infantry and 61 for Certificate "B" Infantry. Since the organization of the Medical Company 45 have qualified for Certificate "A" Medical and 15 for Certificate "B" Medical. In March, 1933, 69 members wrote their Certificate "A" and "B" examinations in both Infantry and Medical.

In the past nine years the Unit has supplied the following officers to the Permanent Force of Canada:

Pilot Officer C. M. Anderson	R.C.A.F.
Pilot Officer R. Slemon	R.C.A.F.
Capt. H. D. Cluff	R.C.C.S.
Lieut. W. E. Leppard	R.C.C.S.
Capt. H. A. Young	R.C.C.S.
Capt. K. C. McCullagh	R.C.C.S.
Pilot Officer W. D. Van Vliet	R.C.A.F.
Pilot Officer H. M. Kennedy	R.C.A.F.
Pilot Officer J. H. Ferguson	R.C.A.F.
Pilot Officer Geo. Kimball	R.C.A.F.
Pilot Officer R. Cameron	R.C.A.F.
Lieut. E. J. Simmons	R.C.C.S.
Lieut. E. Hulbert	R.C.C.S.
Lieut. H. D. Wethey	R.C.C.S.
Lieut. W. J. Gooderham	R.C.C.S.
Lieut, W. D. Wishart	R.C.C.S.

The organization of the University Contingent C.O.T.C. during the 1932-1933 session was as follows:

Officer Commanding	Major H. P. Armes
Adjutant	Capt. R. M. Macdonnell
Quartermaster	2nd Lieut. J. M. Kirkpatrick
Paymaster	Capt. W. F. Riddell
Medical Officer	Capt. C. Neilson, C.A.M.C.

#### "A" COMPANY

(Arts and Science and St. Paul's)

Lieut. L. H. Green 2nd Lt. B. F. Brown 2nd Lt. D. W. Evans 2nd Lt. D. D. Sweeting

## "C" COMPANY (Medical)

Major W. H. Secord, M.C., C.A.M.C. Lieut. T. G. Caunt Lieut. C. G. Wood 2nd Lt. M. S. Margolese 2nd Lt. G. F. Hamilton 2nd Lt. E. L. H. Ellis (Attached) "B" COMPANY (Engineering)

Lieut. H. G. E. Rhodes Lieut. H. C. Rutledge Lieut. B. Sucharov 2nd Lt. J. H. Branacal 2nd Lt. F. H. D. Ellis (Attached)

"D" COMPANY (St. John's College)

Lieut. J. O. Anderson 2nd Lt. A. E. Smith 2nd Lt. J. E. Barrett 2nd Lt. N. R. Clarke

#### STUDENTS' ORGANIZATIONS

### UNIVERSITY OF MANITOBA STUDENTS' UNION COUNCIL, 1933-1934

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- 1. Engineering and Architecture
- 2. Medicine
- 3. Law
- 4. Agriculture and Home Economics